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Abstract: This final performance report focuses on the major activities and

accomplishments of "Early Modern Digital Agendas: Advanced Topics," a

thirteen-day institute hosted at the Folger Institute of the Folger Shakespeare Library in June and July 2015. It describes the expanded audiences, the results of summative evaluations, the continuation of the

project, and the ongoing impact through grant products.

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Introduction

For almost three weeks from 15 June to 1 July 2015, "Early Modern Digital Agendas: Advanced Topics" (EMDA2015) created a forum for advanced digital humanists at the Folger Institute, a center for advanced study and research in the humanities at the Folger Shakespeare Library in Washington, DC. Under the direction of **Jonathan Hope**, Professor of Literary Linguistics at the University of Strathclyde, it afforded fifteen faculty, non-faculty professionals, and graduate student participants the opportunity to historicize, theorize, and critically evaluate current and future digital approaches to early modern literary studies. With the guidance and support of expert visiting faculty, participants learned about the ways that new technologies can shape the nature of early modern research and the means by which scholars will interpret texts, teach their students, and present their findings to other scholars in the near term. As one EMDA2015 participant recently communicated in an email, "In a no-stones-left-unturned way, the participants in EMDA2015 were treated to a full consideration of the microcosm of DH and by extension the larger ecosystem of humanities."

This institute was a second, more advanced version of one that had been offered two years earlier with a larger group of participants, and the staff took lessons learned from that first program to improve upon its outcomes. The 2013 offering took seriously early modern literary scholars' need to take stock of the state of the Digital Humanities (DH) field. This one sought and secured more advanced practitioners who are poised to rethink approaches to early modern texts and who had the skills necessary to reshape the field from within with the expert advice of the visiting faculty.

While the skill level of the participants was higher in the summer of 2015, an overarching theme governed both institutes: intensive and high-level learning and reflection were designed to move participants from the practical to the critical to the theoretical and back again. Along this continuum, discussion recursively circled about several fundamental issues: what specific questions can be asked with digital humanities techniques, and how should we evaluate the quality of the answers? How are these advanced techniques being applied now, and how might they be used in the future to open up new and even more interesting questions?

Description of Project Activities

Folger Institute staff made every effort to communicate the programmatic shape of EMDA2015 in advance to prospective applicants. All announcements and targeted email messages directed potential applicants to an article on the Folgerpedia site. (See **Appendices A-D** for these materials.) According to Google Analytics, before the application deadline this article recorded almost 2,200 unique pageviews with an average time on page of 2:20. The application materials contained a "Dear Colleague" letter written by the Institute's Project Directors and a detailed schedule (drawn from the original proposal). Eligibility rules and a link to the application guidelines and portal were prominently featured for prospective applicants. Offering the full curriculum and goals of EMDA institutes is one way in which the Folger Institute facilitates cross-disciplinary discussion and ensures that scholars and other specialists understand what we believe to be the most interesting conversations underway in the profession.

This promotional site morphed to become our organizational site before, during, and immediately after the institute. It was supplemented by information pushed through two distinct listservs devoted to visiting faculty and participants, respectively. The curriculum, the sequence and content of advance readings, the list of visiting faculty, and the list of participants were all provided for the participants' reference well before their arrival. Links to digital exemplars, scholarly readings, and downloadable software were made available in advance.

The institute normally met on weekdays from 9:30 a.m. to 4:30 p.m. Each day consisted of a two-hour morning session before a ninety-minute lunch break that was followed by a three-hour afternoon session. The daily Folger tea provided the afternoon session with a half-hour break. Throughout the institute, a few open session slots allowed participants to develop their own projects, complete hands-on exercises, and receive

individualized guidance from visiting faculty as needed. These modest sessions were not, of course, sufficient to meet the participants' enormous range of interests and the variety of possible directions to which they were exposed, but they did enable these advanced participants to follow their digital interests with the guidance of the visiting faculty while collaborating with their new colleagues. Weekly evening social events also allowed for conversations to continue and community to build outside the formal sessions.

Following a first day of orientation and community-formation for the participants, **Lisa Gitelman** (Professor of English and of Media, Culture, and Communication, New York University) opened up the theoretical underpinning of EMDA2015 by guiding a discussion on key terms like data, information, and historical media. Her presentation on "media archaeology" was praised in several participant evaluations as a strong foundation for introducing these complex concepts into the subsequent discussion. Professor Gitelman was originally to be joined by two professors of media history for a scholarly roundtable on "Historicizing Data" who were unable to attend due to unforeseen scheduling issues and a family emergency, respectively; however, the directors agreed that since their readings were available for discussion, it was not necessary to replace them on the program, and the conversation did not seem to have suffered.

Following this theoretical foundation, the rest of the-first-week focused on the practical: the creation, curation, and management of data. That work began by recognizing that most text-based early modern digital projects have been—and will continue to be—built upon the corpus provided by the Text Creation Partnership. That project, presented by visiting faculty member Dr. Paul Schaffner (Head of Electronic Text Production at the University of Michigan's Digital Production Library Service and the TCP Production Manager) and Rebecca Welzenbach (TCP Project Outreach Librarian), has transcribed tens of thousands of digital facsimiles found in Early English Books Online, which are themselves converted from mid-twentieth-century microfilms. Thanks to this project alone, the digital resources available to early modern scholars of the English language are more extensive than in many adjacent fields. One participant said of their presentation, "I could not have been more grateful for insights into this corpus's creation, development, and maintenance from Dr. Paul Schaffner and Rebecca Welzenbach, two individuals crucial to this work. Their invaluable perspective is one I seek to honor in my project and via writing in other forums."

The existence of EEBO-TCP seems to have inhibited the creation of competing large-scale corpora. As an example of a different approach, participants practiced with cutting-edge OCR processing software. These efforts, spearheaded by **Laura Mandell** (Director of the Initiative for Digital Humanities, Media and Culture (IDHMC) and Professor of English, Texas A&M University), ensure that the field will continue to refine its working texts, especially for slightly later works with their more machine-recognizable fonts. One participant said, "I was particularly inspired by Professor Laura Mandell's work and her engagement with the seminar and the seminar participants following her workshops." While IDHMC's lead programmer, Matt Christy, was forced for family reasons to attend via Skype, he was able to answer many of the participants' questions as they trained sample texts using Tesseract, an open-access OCR engine.

Regardless of how text is produced, it must be managed and curated, and participants discussed best practices with experts from the field of data curation including Dr. Erika Farr (Head of Digital Archives, Emory University) and Dr. Trevor Muñoz (Associate Director, Maryland Institute for Technology in the Humanities (MITH)) who emphasized the necessity of metadata production and methods to sustain data once it is created. They helped the participants synthesize the many elements of preservation and curation into practical and actionable data management plans for their own projects as well as to develop strategies for sharing data that are relevant and valuable to their various communities of practice.

To conclude the first week, Folger staff members described a number of ongoing Folger projects and ways that these participants might contribute to them; these projects included the <u>Early Modern Manuscripts</u> <u>Online</u> (EMMO) project, which is funded by the Institute of Museum and Library Services, and the NEH-funded <u>A Digital Anthology of Early Modern English Drama</u> project. Staff also described techniques for <u>mining the Folger catalogue's metadata</u>.

Building upon the discussion and hands-on demonstrations of advanced data creation, management, and curation in week one, in the second week participants turned to the various techniques being used to analyze and visualize that new data. Institute Director **Jonathan Hope** pushed the conceptual boundaries when he questioned dimensionality. He asked participants to render a dataset with modeling clay and skewers. These three-dimensional models were then held before a whiteboard to depict a two-dimensional shadow. While deceptively simple, his exercise was noted in many participant evaluations as a favorite session because it launched a discussion that illustrated a crucial question, "How does visualization impede or advance access to patterns now intelligible with DH techniques?"

This was followed by presentations on two of the primary metadata-rich cataloguing efforts for early modern texts, the English Short-Title Catalogue and the Universal Short-Title Catalogue offered by **Alan B**. **Farmer** (Associate Professor of English, The Ohio State University) and Dr. **Goran Proot** (Conservateur, Bibliothèque Mazarine), respectively. Through a statistical analysis of material objects and the structure and content of their descriptive metadata, their joint presentation considered the relative impact of format, leaf counts, edition-sheets, genre, and binding on the likelihood of entire editions having been lost, as well as how lost editions might change our sense of the larger book trade. They examined printing cycles and trends, the economies of the early modern book trade, and the statistical analysis of material and metadata. Together, their presentations illuminated the vital frontiers between DH and the early modern book history field.

This presentation complemented the visiting faculty's approaches for the remainder of the second week that considered statistical, linguistic, and network analysis and the best practices and techniques through which scholars may visualize and understand these analyses. **Tony McEnery** (Professor of Linguistics and English Language and Faculty Dean, Lancaster University) offered a presentation on corpus linguistics that one participant described as "brief yet invaluable. . . . The context thus articulated was one of the clearest I have encountered on the topic, and its centrality to questions addressed by the institute apparent. Not only were his insights vital to understanding the EEBO-TCP corpus, but they have also illuminated possible rationales for building complementary corpora of our own."

Following on Professor McEnery's insightful presentation on corpus linguistics, **David Hoover** (Professor of English, New York University) and **Jan Rybicki** (Assistant Professor at the Institute of English Studies, Jagiellonian University, Kraków, Poland) offered a crash course on recent advances in stylometrics and other statistical approaches to literary texts. The participants appreciated the ways this presentation dovetailed with the one offered by Proot and Farmer the previous day, with one saying, "I found that the book history/short title catalogue segments by Goran Proot and Alan Farmer were a good complement to the stylometric approaches that Jan Rybicki and David Hoover presented. Specifically, I mean that the sum of approaches in that second week encouraged reflection upon very sophisticated, established principles/resources in the field while also promoting examinations of new, exciting methods. This balance strikes me as being of critical importance for practitioners of 'digital humanities' generally." Because this recursive approach to the theoretical underpinnings of related methods was built into the program, the directors are very pleased that this sequence led to such reflections.

Shifting the focus slightly, **Mike Gleicher** (Professor of Computer Sciences, University of Wisconsin) and **Stephan Thiel** (Studio NAND, Berlin) presented the theories underlying visualization, the best practices that go into making effective ones, and the latest developments in commercial applications. One participant said of their presentation, "Because DH is moving rapidly towards more complicated visualization methods, it was very useful to have several solid sessions on the basics of visualization from the two different perspectives Stephan and Mike brought to the table." EMDA2015 was very fortunate to have brought two experts into the conversation who were willing to elucidate and then complicate the first principles of such an important field.

Dr. Ruth Ahnert (Lecturer in Renaissance Studies, Queen Mary University of London) and Dr. Sebastian Ahnert (Royal Society University Research Fellow, Cambridge) presented Quantitative Network Analysis

(QNA), which many participants agreed was an approach with which they were previously unfamiliar but now plan to incorporate into their own research and teaching. As one explained, "All sessions were immensely valuable, and to anatomize them would require many further pages. Yet one session—that of Drs. Ruth and Sebastian Ahnert—helped me see anew areas with which I believed myself familiar, providing inspiration and renewed focus. Not only did I learn immense amounts from their workshop on network analysis with iPython notebooks, but their initial presentation also deftly illustrated the value of invoking large-scale contexts in ways consonant with more conventional humanities scholarship. This dual model is one I seek to emulate in my own work, and I am profoundly thankful." The directors agreed that the Ahnerts' work was so promising that it became the core of a subsequent proposal, which will convene in an institute in July 2017 (see the "Long-Term Impacts" section below for more details).

An established field in DH, Principal Components Analysis (PCA), was illustrated with a case study, the Mellon-funded "Visualizing English Print" project, with Professor Gleicher and Dr. Michael Witmore (Director, Folger Shakespeare Library) joining Professor Hope for this demonstration and discussion. The VEP Team was invited to participate in the EMDA reunion in May 2016 (see below for more details) and the Folger Institute subsequently gathered advanced scholars for a two-day "Visualizing English Print" seminar in December 2016 on the strength of this presentation.

The third week consisted of only three days, but they were crucial as a summative review of the stakes involved in early modern DH. It began with a recasting of the institute's scope through a discussion led by two major figures in the field: Andrew Prescott (Professor of Digital Humanities, University of Glasgow) and Ted Underwood (Associate Professor of English, University of Illinois at Urbana-Champaign). In broadening out from the specifics that participants had been exploring for the previous two weeks, they redirected participants' attention to the challenges that digital tools and methods pose to literary scholars and literary studies more generally. Prescott is a medievalist, with expertise in digital imaging and a keen sense of the history of DH and computational approaches to the humanities generally; Underwood works mainly on nineteenth-century materials, but his publications have consistently raised the issue of what literary scholars must take responsibility for if they are to use digital methods critically and effectively. While they were at opposite ends of the spectrum of English language and literature, together their perspectives interrogated what DH practitioners do, or think they are doing, when they use the techniques explored during the previous two weeks to analyze and interpret corpora at scale.

Their presentations led perfectly to the institute's coda, in which participants prepared and delivered individual and small group presentations. During these culminating sessions, the participants responded to the themes of the institute and laid out plans and issues for their future research. They discussed what they had learned, speculated on what needs to be built or made available to researchers in the field, and described what they have been inspired to investigate further. They and their colleagues addressed project challenges and suggested ways to meet them in a collaborative forum.

Objectives and Accomplishments

EMDA's overarching goal is to foster the Folger Institute's role as a convener, sustainer, and hub of the best work being done in early modern digital humanities. As one participant put it, "I joined EMDA with a project in the works, but left with a much more focused sense of how to proceed and what the end goals of the project should be. In addition to the resources provided by the Folger and the structure of the program Owen and Jonathan put together (visiting scholars, readings, etc.), I learned so much from my fellow participants. The resources I now have available through this network of contacts are truly the part of EMDA that I appreciate most." Connecting projects with critical resources, presenting new approaches to enduring questions, and introducing practitioners of early modern DH to each other are all facets of this. We are proud that our program planning, organization, and implementation of this ODH advanced institute has contributed positively to the larger DH field.

The EMDA2015 institute was typical among Folger scholarly offerings in inviting an excellent director and providing him or her with the tools to organize and implement the envisioned program in line with ambitious goals, to select the most engaged participants and the most generous visiting faculty available, and to remain attentive to the various needs of the guests so that they could focus on the work at hand. EMDA2015 has served to sustain the conversation in a field that is rapidly passing through its adolescence to become a range of standard and accepted methodologies. As one participant said, "DH is not going anywhere, and it is important that students are sufficiently digitally literate, regardless of whether they are pursuing a future academic career or going out into the non-academic workplace. Bringing DH to bear on language and literary studies is a significant part of this literacy. . . . "Increasing numbers of early modern scholars use DH tools and techniques that enhance their interpretation of established questions while making forays into previously inconceivable ones.

The fifteen advanced scholars admitted to EMDA2015 had largely mastered the available digital literacies that are now commonplace in the field. They had sought out this institute as an opportunity to fine-tune their methods and approaches to the complex problems they had set for themselves. EMDA2015 offered fifteen participants an expansively defined training institute populated with world-class visiting faculty that instilled a working knowledge of the methods and models that are pushing the interpretive horizons of early modern studies. EMDA2015 continued the building of an early modern DH community associated with the Folger Shakespeare Library whose members continue to engage with each other to this day. We thank the Office of Digital Humanities at the National Endowment for the Humanities for supporting us in this important work.

Audiences

Like its predecessor, EMDA2015 brought together an impressive and knowledgeable group of scholars and digital practitioners from a variety of campus settings. Their research projects, which were digitally and generically diverse, drew from the breadth of the best work currently being done in digital humanities and should take great advantage of the strengths of the visiting faculty. The participants who joined us in the summer of 2015 represented twelve states— California, Illinois, Indiana (2), Massachusetts, Missouri (2), Nebraska, New York, Ohio, South Carolina, Tennessee, Virginia, and Wisconsin. Also admitted was one foreign national from the United Kingdom. They included one full professor; one lecturer; three assistant professors; and two postdoctoral researchers involved in major digital initiatives. These scholars were joined by eight graduate students, all of whom have advanced digital expertise and of whom five were Ph.D. candidates relying heavily on digital humanities in producing their dissertations. (Appendix E provides the list of admitted participants with their academic ranks, departments, and institutional affiliations at the time of EMDA2015. Appendix F presents the self-introductions of the participants, visiting faculty, and associated staff.)

By means of formal programming and the fostering of informal collaboration, the impact of "Early Modern Digital Agendas" is reaching well beyond the group gathered at the Folger Shakespeare Library in June 2015. This dedicated community of scholars is setting the agendas for early modern digital humanities and creating and enhancing the ways new technologies will shape the very nature of early modern research. Our EMDA2015 participants are fostering the means by which scholars interpret texts and present their discoveries, and, in conferences here and abroad, they are modeling how other scholars might use these techniques or refine them for new purposes.

From the beginning, Professor Hope and Folger staff recognized that the expansive discussion would never fit within the available session time. As eager as the participants were to extend the conversation into new fields and to thus expand the network of ideas and resources, those who were not in the room wanted to join the conversation just as much. Our Technical Assistant for "digital presence" used the twitter handle @EMDigAgendas (first used during the 2013 institute) to live-tweet sessions, and participants were encouraged to tag their tweets with #EMDA2015. Approximately 3,450 tweets with this hashtag were recorded during the course of the institute. Most of these occurred during sessions, for an average rate of

over 230 tweets per meeting day. With this outreach, participants collectively extended the conversation, and hundreds of resources, perspectives, and questions were communicated to those who followed EMDA2015 remotely.

Evaluation

At the institute's conclusion, its participants evaluated the program using an evaluation form that protected their anonymity. Program-specific questions were devised with advice from NEH staff to evaluate the program as a whole as well as the quality of the visiting faculty and the usefulness or applicability of the software and digital examples they presented or demonstrated for early modern scholarship. (Their complete evaluations are included in **Appendix G**.)

Professor Hope and Dr. Williams balanced the institute between critical or theoretical discussions and hands-on applications of tools and techniques, and we were very pleased to hear several of the participants agree that we largely succeeded on that front. One participant contributed this: "Individually, each presentation offered vital perspective, and the cumulative frame of reference created by considering earlier presentations in light of later ones has underscored the logic of the whole." Another explained that "Sessions gave equal attention to A) how the results or conclusions were formed, and B) the degree to which we should give credence to the results. These two components necessarily belong together, but all too often they are treated separately." Many of the evaluations praised EMDA2015 for affording these moments of making or doing and then subsequently reflecting on the consequences of the result or analysis with a knowledgeable cohort of colleagues.

Institute Strengths

In their evaluations, participants indicated a number of program strengths. These included the project's director, the visiting faculty, the host institution, their fellow participants, and the opportunity to participate in the NEH-funded reunion workshop.

Institute Director

It is our long-standing practice to invite as institute director a major scholar in the field who embodies the idea of the generous interlocutor. Perhaps the most prominent factor in the institute's success was the return of the 2013 institute's director, Professor Jonathan Hope (Professor of Literary Linguistics, University of Strathclyde, UK). His insider knowledge of the field led to an innovative framework of overlapping topics that offered a coherent trajectory over the weeks. His stature as a leading linguist and corpus topic modeler ensured that faculty invitations were readily accepted by other top faculty as well as by practitioners from related fields. His quiet and steadying presence created a supportive environment for sustained exploration of complicated materials with participants representing a range of backgrounds and levels of expertise. One participant praised his innovative program design: "Professor Ionathan Hope was a truly inspiring leader. Even after combing through the schedule each morning, I was delighted to find myself surprised each day with the activities he had planned." While many evaluation responses praised his leadership, this one perhaps said it best, "The institute's Director was exceptional, and his coordination provided a phenomenal experience on all fronts. Not only is Dr. Jonathan Hope adept at cultivating scholarly and interpersonal community, but his expertise in corpus linguistics continually connects with and enriches the research interests of all participants. During EMDA2015, his daily framing of topics drew upon multiple perspectives while providing continuity, and his genuine engagement with the insights of both participants and faculty proved a model for ongoing conversation. One could not envision a leader more appropriate." We at the Institute agree wholeheartedly.

Visiting Faculty

Visiting faculty led lively discussions of pre-circulated readings and demonstrated their own tools, software, and approaches. In a recent email, a faculty participant proved how valuable their presentations were, "The approach of presenting a multitude of tools and accessible online resources provided me with a rich toolbox; I still go back in my notes even two years later to retrieve a link or some helpful hint about employing a tool." Almost all the participants commented that the institute was an intense experience and that they often did not have time to process fully what they were learning. To partially ameliorate these constraints, the invitations extended to visiting faculty were liberal; while the institute was designed to build from topic to topic, if their schedules allowed, a visitor could extend his or her stay to participate in additional sessions in a supporting role. Several accepted the offer, to the conversation's great advantage. As one participant said: "The faculty were incredibly approachable and exemplified 'humanism' in its most generous sense."

We ensured that the participants and visiting faculty had multiple informal opportunities to get to know each other and to continue conversations around topics initially brought up in the sessions themselves or to follow tangents related to the participants' own digital work. One participant said, "EMDA2015 faculty were ... stellar, and the breadth and depth of topics covered remain nothing short of astonishing. Special thanks are due to Drs. Ruth and Sebastian Ahnert, Professor Laura Mandell, Dr. Paul Schaffner, and Professor Andrew Prescott, all of whom engaged EMDA2015 participants at length by remaining with the group for days beyond their own presentations. As a rising scholar, being part of this evolving discussion among the field's experts will shape my perspective for years to come." Regardless of the academic rank of the participant, the faculty were excited to help them further their project, anticipate pitfalls, and find the resources required to succeed.

Folger as Host Institution

The Folger prides itself on being an excellent host for all of our visitors, and EMDA2015 was no exception. Even small gestures (like mailing Metro SmartTrip cards to our participants in advance of their arrival) were very much appreciated by the participants. In the words of one, "Wow, everything at the Folger was outstanding. The meeting space was comfortable, the hospitality definitely top-notch, the library world-class. I felt welcome there."

Several of the participants did suggest that all software should have been made available in advance, perhaps through the GitHub platform, so as to reduce stress on Folger wifi and preserve more reflection time between presentation sessions. While the Folger Institute staff would agree, and offered as much of this as possible before the institute, much of the software being introduced is currently proprietary and in development. Thus the visiting faculty usually arrived with the most recent update packages for installation. Given the range of OS and technical proficiency among the participants, we opted to help them install exactly what was needed just in advance of the session and then debug it as necessary.

These installations were overseen by two additions to the Folger Institute staff who helped us realize the institute's organizational and programmatic goals. They were our pair of Technical Assistants, Wisconsin graduate students **Eric Alexander** and **Deidre Stuffer**, who were nominated by Professor Hope and readily accepted by Dr. Williams. Many evaluations associate the same word with them: "invaluable." From a programmatic point of view, this is certainly the case. They were crucial in advance technical coordination with visiting faculty, in the preparatory moments before the institute and during the institute itself, in reconnecting dropped wireless connections, in loading and troubleshooting presentations, in assisting with software uploads and debugging, in reloading documents inadvertently deleted from the institute's Dropbox, and in live-tweeting as @EMDigAgendas. (Their technical report is found in **Appendix H**.)

EMDA2015 Participants

Both EMDA institutes have assembled impressive and knowledgeable groups of scholars and practitioners from a variety of institutional settings. Even more so than those from the earlier institute, the EMDA2015 participants revealed themselves to be serious and experienced practitioners who were able to shift between hands-on practical applications of a tool or technique and theoretical interrogations of why it might or might not be the most appropriate approach to a given research question. As one said of his or her colleagues, "The institute opened my eyes to a very unique and rich research community, and the number of scholars with complementary interests and expertise to my own research. I want to continue these conversations, and also make connections between EMDA participants and other colleagues." We at the Folger strive to sustain these conversations and connections.

From the start, community formation was understood as a crucial task for the institute. These efforts paid off in terms of respectful and engaged discussion, offers of technical project assistance on multiple occasions, and collaborative approaches to research. As one participant explained, "Being able to share experiences and concerns with the cohort of specialists EMDA brought together was one of the most valuable aspects of EMDA. I returned home with a much better idea of how to develop my project, but also with the awareness that I can now rely on the group to discuss my project further and share ideas and information."

The directors made every effort to ensure that scholars of all ranks felt valued during the institute. One early-stage participant said, "I will continue to communicate and work with some of the other EMDA participants on future projects, talks, conference panels, etc. Those partnerships are by far the most valuable take-away from this institute. Especially as a graduate student about to go on the job market, having faculty members at institutions around the country that I can reconnect with at conferences and professional events is such a benefit to my future in this field." Conference meet-ups, invited lectures, and the like have helped the group sustain the conversation and widen the DH circle of early modernists.

Reunion Workshop

In May 2016, as a grant-supported activity, the Folger Institute hosted a two-day workshop and reunion for as many of the EMDA2015 participants as were available to reconvene. While some funds had been committed to this event from the start, the Folger's NEH Grants Administrator **Melody Fetske** and EMDA Administrative Project Director **Owen Williams** received approval from NEH Grants Officer **Jerri Shepherd** on a budget re-allocation to repurpose the modest remainder of the original budget towards EMDA2015 participant travel. The Institute also secured additional, non-NEH funding to bring the participants from EMDA2013 to this workshop.

To expand the conversation, the Folger Institute invited all thirty-five participants from both the 2013 and 2015 Early Modern Digital Agendas institutes to attend to describe current progress on their projects. For this reunion workshop, twenty-eight of the thirty-five EMDA alumni (including fourteen of the fifteen EMDA2015 group) convened. While travel and lodging for the EMDA2015 cohort was funded through its grant as specified in the approved and revised budgets, funds for the EMDA2013 group were leveraged from a Mellon-funded project, "Visualizing English Print," to support travel in hopes that all participants could attend an additional, optional day of presentations devoted to that project.

The reunion workshop began with lunch on Monday afternoon, May 16, so that those from the East Coast could travel to Washington, DC, that morning. For that afternoon and the next morning, it was structured around participant presentations of their current projects. They described their progress in 10-, 20-, and 30-minute slots for which they had signed up in advance. Participants recounted technical developments in stylometry and historical linguistics, innovative corpus processing, new collaborations and partnerships, pedagogical opportunities, ways to open archives (both digital and traditional), and issues of "fundability." Time and again the presentations underscored the ways this group is making digital humanities accessible to

others while justifying this type of work as valid and exacting scholarship. They oscillated between qualitative and quantitative modes of "doing" DH while forging connections between enduring questions and emerging modes. One participant exclaimed, "It's clear that members of both Institutes are leading scholars in the broadly conceived fields of Early Modern studies and information studies; everyone involved is truly pushing at the boundaries of their disciplines." As an outreach component of this event, the three technical assistants from both EMDA institutes assisted with live-tweeting the presentations via #emdaremix.

Following these presentations, the second afternoon offered the Folger Director of Digital Access, Eric Johnson, a chance to outline the digital asset contribution policy that will govern the partnerships into which the Folger will enter and the Folger's capacity for housing and sustaining born-digital resources within our forthcoming Digital Asset Platform. His presentation was followed by updates on two digital projects, the IMLS-funded Early Modern Manuscripts Online project and the NEH Preservation and Access project, A Digital Anthology of Early Modern English Drama. Folger staff described the opportunities for digital scholars of all levels and academic ranks to contribute and collaborate.

The afternoon culminated with a ninety-minute, meta-critical discussion on "Transforming DH/Transforming Ourselves" moderated by EMDA Project Director Jonathan Hope. Following this lively discussion about the distinction to be made between quantitative and digital scholarship, members of the Mellon-funded "Visualizing English Print" team—EMDA Director **Jonathan Hope** and EMDA2015 faculty **Michael Witmore** (Director, Folger Shakespeare Library) and **Michael Gleicher** (University of Wisconsin)—previewed the schedule for Wednesday for those who planned to attend.

During the reunion workshop, participants shared their projects with scholars and digital builders in a generous and generative setting. Looking back, many of the participants mentioned in informal evaluations that it was the mix of both groups—not just the colleagues with whom they has already spent intensive weeks—that made the reunion workshop a valuable opportunity. Working on similar corpora with overlapping tools, they were able to offer cogent advice and solutions to ways that projects might fruitfully be expanded. As one participant put it, "Overall, the workshop presented a unique opportunity to forge and strengthen connections enriching our distinct, yet mutually informed and informing, projects." Because they could not assume that their audience was familiar with their projects, they had to describe their accomplishments and challenges explicitly for a knowledgeable group.

Such reunions offer digital humanities scholars and builders an ever expanding and distributed community of practice, but they also serve as a place to renew and revisit conversations, and the continued conversation among advanced DH practitioners who are on the theoretical and practical cutting edges of the field is itself an objective of the EMDA institutes. As one participant said, "Complementary perspectives taken by the two cohorts supported high-level technical discussions and thoughtful, sustained critiques, both of which have proven vital to my project's progress."

These gatherings are especially crucial for younger DH practitioners. They enable graduate students to form the personal learning networks that they need to advance their own knowledge and expertise, and the exposure to practical applications of new tools and techniques is largely unavailable elsewhere. At this gathering, participants created innovative panels for upcoming conferences, established workgroups for technical questions, and invited each other to become project advisors for a variety of digital initiatives. As one participant said,

The reunion showcased the very best ways that DH projects are enriching the field: cross-institutional collaboration, pedagogical experimentation, and interactive public-facing projects that are increasing awareness and drawing attention to the valuable work being done in Early Modern Studies. For my own projects, the EMDA reunion was a great chance to meet and collaborate with researchers who are looking beyond the traditional academic monograph—towards the already-

arrived digital future, yes, but also to new forms of sustainable and publicly-valued engagements with the humanities writ large.

Through this gathering of scholars—perhaps the largest of its kind devoted to early modern digital studies—we continued to solidify the Folger Institute's status as a hub that indicates and fosters the resources, advice, professional networks, and innovative ideas that have proven to be most useful for early modern DH scholars.

Institute Challenges and Solutions

During and after EMDA2015, some participants called for more dedicated build time to take advantage of the new software and approaches to which they were being introduced. Since the institute did encourage participants to bring their own data and, as often as was practical, to process that data for analysis, this is a natural request. As we had expected, an advanced community of users was more capable of devising ways that they could mutually enhance their discoveries of data analysis. While we are confident that we provided the participants with the connections that they need to start these explorations, we will certainly strive to match the necessity for build time with the expertise of the participants for all future institutes.

At least a partial solution to the inevitable request to host and maintain the products created by these advanced practitioners is the creation of a Digital Asset Platform currently under development and outlined by the Folger Director of Digital Access, Eric Johnson, during the reunion workshop. While it is still in the prototype phase, it will soon allow for the ingestion of objects created by our users and commits us to maintaining them for future scholarly re-use.

Another lesson learned is that advanced topics like this one must simultaneously be field specific. While we could expect the participants to be knowledgeable about several aspects of DH, the range of topics covered by the visiting faculty could not be expected to map onto that range of participant expertise closely enough to satisfy them at every point during the institute. With this in mind, the directors agreed that the proposal for the upcoming EMDA institute would focus on one complex field, network analysis, so that the participants' expectations would be clarified and could be met more satisfactorily.

Continuation of the Project

Through EMDA and other digital initiatives, the Folger has emerged as a stakeholder in DH knowledge production and dissemination. Now that we have established the "EMDA brand," the impact of "Early Modern Digital Agendas" has reached well beyond the dedicated community of scholars gathered for multiweek advanced topic institutes at the Folger Shakespeare Library. While the participants want to continue the project after the grant period, the reality of institutional resources precludes such an open-ended expectation. However, the Institute will certainly seek non-NEH funding to support alumni of both the 2013 and 2015 cohorts to attend the reunion workshop in late-spring 2018 for the EMDA2017 program that is described below in the section on "Long-Term Impact." In the meantime, the Folger will continue to reach out to past participants with particular skill sets to build scholarly networks and enhance projects both based at the Folger and with which the Folger is associated.

Grant Products

EMDA2015 participants have taken advantage of conferences large and small to convene professionally and socially while presenting some of the most exciting Digital Humanities work currently under development. They show the range of expertise that was assembled for the institute and the many connections that participants made with the approaches presented by expert visiting faculty and with each other. With each presentation or demonstration at "mainstream" conferences like the Shakespeare Association of America, the Renaissance Society of America, and the American Society of Eighteenth-Century Studies, scholars working

in non-digital fields and approaches have another opportunity to recognize how their current research may benefit from new techniques that are becoming ubiquitous through the outreach of the generous scholars gathered by EMDA.

Due to the advanced nature of the participants' projects, the grant products from the EMDA2015 institute have mostly been individual efforts rather than collaborative products like the Folgerpedia <u>wiki articles</u> produced by the EMDA2013 cohort. Most of the EMDA2015 participants have produced and presented exciting work, and those that have been reported have been added to the NEH's <u>grant products</u> website.

The three following vignettes outline the recent developments of some of the earliest stage scholars who participated in EMDA2015. They give a sense of the many directions in which participants have developed their interests and expertise.

Don Rodrigues (Vanderbilt University) has produced "Shakespeare, Editor" in conjunction with Harvard University's metaLAB. This project deploys both digital and traditional analytical methods to visualize the "hand" of Shakespeare in a selection of works to which he contributed so as to better grasp the Bard's role as collaborator and editor. Dr. Rodrigues reports that his dissertation, "Virtue: Reality: Axiology and Imagination in the English Renaissance," is deeply informed by the digital tools and methods he acquired during EMDA2015, and the colleagues he talked with have refined his research questions and approaches significantly. One component of his dissertation is a "digital chapter" presented at the reunion workshop in May 2016. He reports that his project would not have been possible without the training and support he acquired at EMDA events; he will be acknowledging the NEH's support in his dissertation.

Whitney Sperrazza (Indiana University) will be starting a DH-research postdoctoral position at the University of Kansas in fall 2017, and she thanks the EMDA2015 experience (and the larger EMDA network) for it. She reports that "the skills training and conceptualization work we did at EMDA set me on a path developing and honing my project over these past two years, and I was able to apply for the KU postdoc with a carefully outlined project and proof-of-concept for the job committee. And it was EMDA2013 faculty participants, Jonathan Lamb and Ellen MacKay, who encouraged me to apply even at the ABD stage. So, as a graduate student, I can't say enough good things about this program. Not only did it provide essential skills training for me to make strides with my digital work, but it broadened my network far beyond my own campus." She adds that, "It just seems to me that opportunities like these are essential for graduate students in the current job market. Whatever the NEH can continue to provide on this front will undoubtedly have a measurable impact both on graduate student professionalization and the quality of projects and research at the graduate and junior faculty levels."

Jacob Tootalian (University of South Florida) is now co-director of the Digital Cavendish Project (digitalcavendish.org), which catalogues and contextualizes all of Margaret Cavendish's writings that are freely available online. Cavendish was the first woman to attend a meeting of the Royal Society, she wrote complex scientific prose of her own that perceptively critiques some of the problematic assumptions that continue to undergird modern scientific practice, and she is sometimes regarded as one of the first writers of science fiction. Thus, her work is of interdisciplinary interest to fields including literature, gender studies, the history of science, the history of philosophy, and political science. Dr. Tootalian credits **Paul Schaffner**'s discussions of the EEBO-TCP corpus with helping him understand the variety of forms in which these digitally transcribed texts can be accessed, and **Laura Mandell**'s <u>Early Modern OCR Project</u> (EMOP) with the ongoing OCR transcription work that makes up part of the "<u>Crowdsourcing Cavendish</u>" initiative. He also credits the EMDA2015 experience with helping him develop the knowledge and skills that earned him a Renaissance Society of America tuition award to the University of Victoria's Digital Humanities Summer Institute.

These are just three examples of the many roles EMDA participants and faculty members are playing in digital knowledge creation and application for early modern digital scholarship. We are proud to have identified and fostered so many members of the rising generation of digital humanities scholars and to have brought them to the Folger from a variety of institutional settings.

Long-term Impact

From its inception, the Folger Institute's goal for "Early Modern Digital Agendas" has been to support an active and sustained afterlife to guide those who are starting their engagement with digital humanities, who hope to advance current expertise, and who wish to become a part of the most advanced group of early modern DH scholars. In recent years, scholars at all stages of their careers have asked the Folger Institute for advice on how one engages with the digital analysis of literature, the most effective ways to communicate their discoveries to colleagues and students, and the knowledge with which they might evaluate scholarly claims made with digital techniques. Because we are convening these programs at the Folger, we are now better positioned to contribute to and guide the conversation.

One participant respondent explained that the EMDA2015 institute was useful for "pushing me out of my previous comfort zone and encouraging me to be more ambitious and to use digital resources across the spectrum, rather than sticking to known methods or tools for particular parts of my investigations." Other, more advanced, practitioners thought that a number of the tools under discussion were fairly standard ones and urged us to consider even more advanced and less familiar tools for future investigations. In any emergent field, this can be a difficult balance to strike. We took to heart participants' advice in the EMDA2015 evaluations to expand the disciplinary and technical reach of early modern DH, but we also need to ensure that we are fostering the field in a way that sufficient numbers can make use of our efforts. Integrating statistically informed methodology into literary analysis may well prove to be a conjunction that fulfills a number of goals, and the Folger will watch DH scholars for signals that statistics are sufficiently well practiced to make this a viable institute.

With this in mind, under the co-direction of returning EMDA director Jonathan Hope and EMDA2015 distinguished faculty member Ruth Ahnert, the upcoming EMDA2017 advanced topics institute will bring together experts from the field of network analysis to examine one of the most "quantitative turns" in early modern digital humanities, network analysis. As before, participants will investigate tools developed by visiting faculty to manage, analyze, and visualize data in new ways. In this more focused exploration, however, additional "build sessions" will be interspersed to guide the participants' experiential learning of the most advanced quantitative and social network analysis techniques available. These sessions will guide participants through the process of selecting their source material, extracting data, building and structuring their database, cleaning their data, and visualizing and analyzing their data with off-the-shelf tools. This will precede teaching them how to write their own code to perform tailored network analysis before the participants demonstrate the data sets and analyses they have built during the Institute, or respond to the ideas they have encountered in relation to their own future plans, in their final presentations.

EMDA2017 has the potential not only to shape the ways people are using advanced network analysis methods and developing new network tools and projects for the humanities, but also to determine the future trajectory of a field that we might term "cultural network analysis." The application of computational methods from the fields of network science with aesthetic principles from the field of design technology gives us new ways to engage with some of the thorniest questions at the heart of early modern studies; they also allow us to pose questions impossible to even imagine before the age of digitization. This, however, is a field in its infancy: one that has yet to establish protocols, best practices, and even the language by which we invoke technical processes and methods. We have the opportunity during this upcoming institute to begin to reach some consensus on these issues. It promises, then, to be an important intervention within the discourses of both digital humanities and early modern scholars, not only for the participants and faculty, but for the scholarly community as a whole.

General Advice

As with the White Paper for EMDA2013, the Institute would like to share a distilled list of advice for those considering a program along the contours of the EMDA institutes.

Before the program

- Assemble a project team with both technical and logistics strengths who can solve problems collaboratively
- Ensure that a welcoming and intellectually generous director invites colleagues who are ready to share their knowledge in engaging and collegial ways
- Select participants who play well with others
- Ask participants through which channels they prefer to receive information; use those channels
- Remember the human: anticipate participant and faculty needs as much as possible, and be flexible in meeting new requests; they may point to new directions that your organization wants to encourage

During the program

- Schedule casual social interactions as often as possible, but don't feel the need to control or oversee additional ones; the more comfortable participants feel working with each other and the visiting faculty, the better your outcomes will be
- Keep sessions on time, and schedule breaks between sessions; encourage your participants to use them to step away from the intellectual action so that they can think freshly and productively
- Be alert to unspoken needs, and draw on expertise beyond the project team as needed

After the program

- Arrange to bring participants back together after the initial program
- When you make requests of participants after a program's conclusion, remember to build in additional time (i.e., if they are good enough to be admitted to your program, they likely have extremely busy lives)
- Put participants in touch with emerging projects that may be able to utilize their expertise; keep networks active and participatory

Appendices of Supporting Materials

Appendix A

September and January Folger Research eBulletin Announcements

Appendix B

"Digital Humanities Training Opportunities" in The Chronicle of Higher Education

Appendix C

@EMDigAgendas Tweet

Appendix D

EMDA2015 Folgerpedia Article

Appendix E

List of EMDA2015 Participants

Appendix F

Self-introductions of Admitted Participants and Visiting Faculty

Appendix G

Full Participants Evaluations

Appendix H

Technical Report

Below are two notices taken from our Folger Research eBulletins for September 2014 and January 2015. The Research eBulletin is sent to over 6,000 scholars.

September 2014:



NEH Funds Early Modern Digital Agendas in 2015

Thanks to a generous grant from the NEH's Office of Digital Humanities, a second iteration of Early Modern Digital Agendas will be offered in June 2015, under the direction of Jonathan Hope, Professor of Literary Linguistics at the University of Strathclyde. Designed to take advantage of the public release of EEBO-TCP's Phase 1 corpus of 25,000 early modern texts, EMDA2015 will welcome fifteen participants to work with their own data sets on advanced topics that include OCR processing and training data sets, statistical analysis of metadata, corpus analysis and stylometrics, advanced data visualization and design, and quantitative network analysis. Materials describing the intensive three-week institute and its visiting faculty will be available this fall. The application deadline is 2 March 2015.

Discover EMDA2013 resources on Folgerpedia.

January 2015:



Apply Now for Second Early Modern Digital Agendas Institute!

Early Modern Digital Agendas: Advanced Topics will be directed by Jonathan Hope, Professor of Literary Linguistics at the University of Strathclyde, from 15 June through 1 July 2015. Funded by a grant from the NEH's Office of Digital Humanities, EMDA2015 is designed to take advantage of the public release of 25,000 early modern digital texts from ProQuest's EEBO-TCP initiative. Advanced participants are encouraged to bring their own research questions and data, and to process that data for analysis with tools introduced by the visiting faculty. Participants and faculty will collaboratively address fundamental questions: What is "data"? What transformations lie behind statistical analysis? How is corpuswide variation being treated in different data sets? What are the principles and best practices of visualization? The aim is to enable participants not just to analyze texts or curate data but to understand the processes they engage in—where they enable, how they restrict, and how they might be improved. Apply by 2 March 2015.

Visit Folgerpedia for more information about EMDA2015.

THE CHRONICLE OF HIGHER EDUCATION



February 24, 2015 by Prof. Hacker

Digital Humanities Training Opportunities



[Lee Skallerup Bessette is a Faculty Instructional Consultant at the Center for the Enhancement of Teaching and Learning (CELT) at the University of Kentucky. She primarily works with faculty on digital pedagogy and digital humanities. She blogs at College Ready Writing (https://www.insidehighered.com/blogs/college-ready-writing) and you can find her tweeting prolifically at @readywriting (https://www.twitter.com/readywriting/).--@JBJ]

It's getting to be (or, really, probably past, but let's face it, <u>we all procrastinate</u> (http://chronicle.com/blogs/profhacker/procrastination-our-old-frenemy/59431) that time where we plan for what we will be doing with our summers. And, the beginning of March is looming, which is typically the date to apply for various fellowships and workshops.

There has been a lot of growth recently in intensive summer Digital Humanities training opportunities, but also a growth in demand. The well-known (and well attended) <u>Digital Humanities Summer Institute (http://www.dhsi.org/)</u> (or DHSI) has expanded to three weeks worth of workshops (spend most of June is lovely Victoria if you can!). There are also opportunities to attend mini-workshops at <u>DHSI@Congress (http://www.dhsi.org/events.php#DHSI@Congress)</u> (this year in Ottawa at the end of May), and a longer iteration on the other coast of Canada, <u>DHSI@Dal</u> (http://www.dal.ca/faculty/arts/research/disc/DigitalHumanitiesSummerInstitute.html).

There are a number of other DH training workshops across the globe including

- DH@Oxford (http://digital.humanities.ox.ac.uk/dhoxss/) (20 24 July 2015),
- DH@Leipzig (http://www.culingtec.uni-leipzig.de/ESU C T/) (28 July 7 August 2015),
- DH@Switzerland (http://www.dhsummerschool.ch/) (TBA 2015), and
- EDIROM DH (http://ess.uni-paderborn.de/) (7–11 September 2015).

Closer to home (like, somewhere where you won't need a passport if you are living and working in the States), the <u>Humanities Intensive Learning and Teaching (http://www.dhtraining.org/hilt2015/)</u> (HILT) workshops will be held from July 27th to July 31st on the campus of Indiana University-Purdue University Indianapolis. This is the second year of the workshops, and it is a great experience (full disclosure: I'm teaching the workshop on Digital Pedagogy).

MITH, on the University of Maryland campus, is holding a workshop "Engaging the Public: Bets Practices for Crowdsourcing Across the Disciplines (http://mith.umd.edu/open-call-applications-engaging-public-best-practices-crowdsourcing-across-disciplines/)," which is co-funded by the NEH, the Institute for Museum and Library Services, and the Sloan Foundation. The deadline for applying is March 2.

The NEH Office of Digital Humanities also funds a number of DH training and workshop opportunities. This summer, they have funded the following:

- Advanced Challenges in Theory and Practice in 3D Modeling of Culture Heritage Sites (http://advancedchallenges.com/)" at both UMass Amherst and UCLA (deadline March 30);
- <u>Institute for Community College Digital Humanists: Beyond Pockets of Innovation, Toward a Community of Practice</u> (https://blogs.lanecc.edu/dhatthecc/summerinstituteinformation/), to be held at Lane Community College in Eugene, Oregon (deadline March 3); and
- <u>Early Modern Digital Agendas: Advanced Topics (http://folgerpedia.folger.edu/EMDA2015)</u>, at the Folger Shakespeare Library in Washington, D.C. (deadline March 2).

There are others this summer, but the deadlines have already passed. You can read about all of them here (http://www.neh.gov/divisions/odh/institutes).

The Getty Foundation has also started funding DH training opportunities for art historians. There will be workshops at

• George Mason (http://arthistory2015.doingdh.org/) (Rebuilding the Portfolio: DH for Art Historians; deadline March 15),

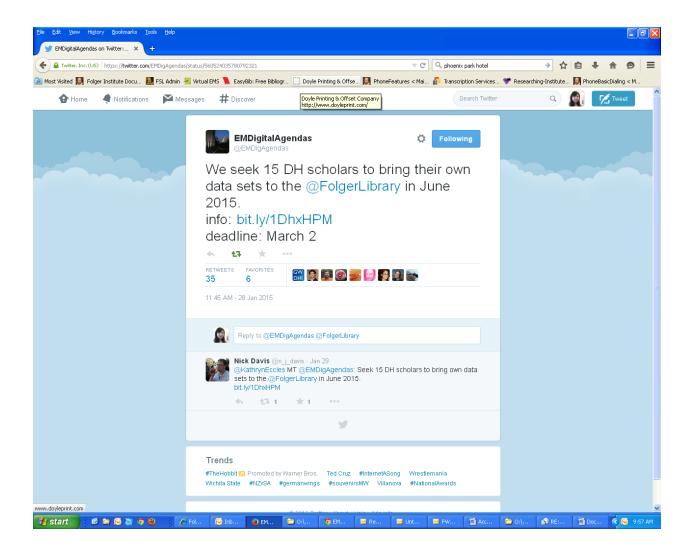
- <u>Harvard (http://beautifuldata.metalab.harvard.edu/)</u> (Beautiful Data: Telling Stories about Art with Open Collections; deadline March 1), and
- <u>UCLA (http://www.humanities.ucla.edu/getty/)</u> (Beyond the Digitized Slide Library, deadline March 1).

You can read more about them here (http://www.getty.edu/foundation/initiatives/current/dah/dah grants awarded.html) on the Getty Foundation site.

These are the ones I have found, but I am sure that I am missing some. **Please share any summer DH workshop opportunities I** have missed in the comments!

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EMDA2015

Following on the success of the first "Early Modern Digital Agendas" institute—an intensive survey of the most current resources and methods in digital research to be found in July 2013—"Advanced Topics" is a second three-week NEH institute to be hosted by the Folger Institute at the Folger Shakespeare Library. **Jonathan Hope**, Professor of Literary Linguistics at the University of Strathclyde, will direct an advanced exploration of data creation and management to be followed by various forms of hands-on investigation, including text analytics, social network analysis, dimensionality reduction, research process design, and even historical reflection on the nature of "exemplarity" claims in humanistic argument. It is supported by a \$175,000 Institutes for Advanced Topics

(http://www.neh.gov/divisions/odh/grant-news/announcing-five-institutes-advanced-topics-in-the-digital-humanities-july-2) grant from the NEH's Office of Digital Humanities (http://www.neh.gov/divisions/odh).

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Program Details

The "Early Modern Digital Agendas: Advanced Topics" Institute will meet from 15 June through 1 July 2015, and admitted participants are expected to be in residence for the entire time. It will convene a technically advanced cohort of fifteen early modern digital humanists for scholarly assessment of the most effective tools by which data sets are gathered, curated, and analyzed. EMDA2015 will build in more time than its predecessor for application and experimentation with the tools to which its participants will be introduced; it will also encourage participants to

bring their own data and, as often as is practical, process that data for analysis with the tools that the visiting faculty introduce. Details about the Institute's curriculum are available.

Participants will reflect on the ways DH expands the universe of possible questions that literary scholars can ask while new technologies produce exponentially larger bodies of evidence faster than ever before. Among the questions visiting faculty will pose and consider with the participants: What is "data"? What transformations lie behind statistical analysis? How is corpus-wide variation being treated? What are the principles of visualization? The aim is to enable participants not just to perform analysis, or curate data, but to understand the processes they engage in—where they enable, how they restrict, and how they might be improved. It remains the Folger's goal to ensure that DH practitioners question not only what is possible with digital tools, but why one would put them to certain uses, and at what costs.

Applicant Eligibility

This institute is designed primarily for college faculty and staff at U.S. institutions who study the texts, writing, and literature of early modern England. Qualified graduate students, independent scholars, and those employed by museums, libraries, historical societies, and other organizations are eligible provided they can effectively advance the teaching and research goals of the institute. Priority in admission will go to applicants who are United States citizens, residents of U.S. jurisdictions, or foreign nationals who have been residing in the United States or its territories for at least the three years immediately preceding the application deadline. Foreign nationals teaching abroad at non-U.S. chartered institutions are eligible to apply; those who have collaborated or who plan to collaborate with U.S. partners in digital initiatives will be more competitive applicants.

An applicant need not have an advanced degree in order to qualify; adjunct and part-time lecturers are eligible to apply, as are staff in digital humanities centers, librarians, and others who are interested in participating in a scholarly assessment of the most effective tools by which data sets are gathered, curated, and analyzed. Individuals may not apply to study with a director who is a current colleague or a family member. Institute selection committees are advised that only under the most compelling and exceptional circumstances may an individual participate in an institute with a director or a lead faculty member who has guided that individual's research.

Application Information

The Dear Colleague letter (in pdf) is written for all prospective applicants. It contains detailed information about the topic, participation requirements and expectations, and the academic and institutional setting.

All applicants must apply through the Folger Institute's online application system (https://www.onlineapplicationportal.com/folgerscholarlyprograms/). The application guidelines will undoubtedly answer many questions that applicants may have. Before submitting an application, they should review the curriculum to ensure that they can address the ways their work will benefit from and contribute to the institute's goals. The application deadline is 2

March 2015.

Questions?

Please send any questions to institute@folger.edu (mailto:institute@folger.edu).

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Early Modern Digital Agendas: Advanced Topics

Directed by Jonathan Hope

Marina Ansaldo University College, Humanities Institute Research Associate - School of English, Drama, and Film Dublin Washington University **Anupam Basu** Postdoctoral Fellow -Interdisciplinary Project in the Humanities in St. Louis University of Birmingham, UK **Mel Evans** Lecturer – English Assistant Professor – English Michael Gavin University of South Carolina **Collin Jennings** PhD Candidate – English New York University **Andrew Keener** PhD Candidate – English Northwestern University **Lauren Kersey** MA Student – English Saint Louis University Assistant Professor – Journalism, Creighton University **Brian Kokensparger** Media, and Computing Hillary M. Nunn Professor – English University of Akron **Brad Pasanek** University of Virginia Assistant Professor – English **Don Rodrigues** PhD Student – English Vanderbilt University Jason Rozumalski PhD Candidate – History University of California, Berkeley Whitney Sperrazza **Indiana University** PhD Student – English Jacob Tootalian PhD Candidate – English University of Wisconsin-Madison

PhD Candidate – Editorial Studies

Boston University

Erica Zimmer

Early Modern Digital Agendas: Advanced Topics

Directed by Jonathan Hope

Marina AnsaldoHumanities Institute Research AssociateUniversity College,- School of English, Drama, and FilmDublin

I completed my PhD in 2012 in NUI Galway, Ireland with a thesis comparing representations of Fortune in three versions of the Troilus and Cressida story (Boccaccio's *Filostrato*, Chaucer's *Troilus and Criseyde* and Shakespeare's *Troilus and Cressida*). My interest in Digital Humanities began shortly afterwards – I worked as a postdoctoral researcher on two separate Irish DH projects. I developed *Reading East* in University College Dublin (www.ucd.ie/readingeast). The site is a selective descriptive catalogue of early modern printed texts that attest to contact between Europe and the East, held in Dublin research libraries. Then, I worked on the development of *Ireland Illustrated*, a database showcasing illustrations of Ireland, and related descriptions, that appeared as part of travel accounts, both manuscript and printed, created before 1850. The project represents a collaboration between The Moore Institute (NUI Galway) and the National Library of Ireland.

I am now attempting to combine my interest in the Digital Humanities and my obsession with early modern representations of Fortune, and planning a database and related monograph on Fortuna and Occasio in renaissance literature and visual arts.

Anupam Basu Postdoctoral Fellow – Washington University Interdisciplinary Project in the Humanities in St. Louis

I am a post-doctoral fellow at Washington University in Saint Louis. My recent work has focused on the standardization of English orthography over the first two centuries of print and on how patterns of orthography might be used to date texts. I am also interested in identifying anomalous patterns of word usage at scale to think about how they might help us understand higher order phenomena such as style, archaism, or influence across a large set of texts. A current project on Spenser asks how we might think about his archaism as a function of his orthographic and lexical choices. Do these choices reveal certain conscious or unconscious affiliations to a specific set of writers and texts that influence him or allow us to rethink Spenser's alleged medievalism, for example? The data underlying these projects is available through a portal -- http://earlyprint.wustl.edu -- I have been building that seeks to make the EEBO-TCP corpus tractable to computational analysis as a database of ngrams and also implements sophisticated fuzzy and regular expression based searching across the corpus.

I am also interested in the ways we can theorize the use of computation to express literary ambiguity and complexity. I recently organized a <u>seminar at the SAA</u> on this topic and hope to move this conversation forward at the EMDA.

Finally, my monograph in progress traces how a popular discourse of criminality enters and shapes the social imaginary in early modern England and includes an algorithmic exploration of the evolution of the linguistic tropes which describe criminality across the EEBO-TCP corpus.

Mel Evans

Lecturer – English

University of Birmingham, UK

I'm a Lecturer in English Language at the University of Birmingham. I'm a stylistician by training, although now draw on historical sociolinguistic and pragmatic approaches in my work. I'm broadly interested in how corpus-based approaches to linguistic variation, and materiality, can be used to better understand the historical development of Early Modern English, particularly from an idiolectal and social network perspective.

I've got two projects on the go, at the moment. The first is a book project "Royal Voices", exploring the textual construction of royal authority in 16th century England, following on from my thesis on "The Language of Queen Elizabeth I" and some recent work on speech and thought representation in Early Modern letters.

The second is part of a team project preparing a new edition of the writings of Aphra Behn. My present role focuses on computational stylistic approaches to her style and authorship attribution, although I will hopefully get to do some editing of her correspondence, too.

Michael Gavin

Assistant Professor – English

University of South Carolina

I'm Michael Gavin, assistant professor of English at the University of South Carolina. I teach eighteenth century British literature and digital humanities. Within the realm of "dh," I dabble in several areas: agent-based modeling, social network analysis, textual/conceptual modeling, and, most recently, geospatial analysis.

Within the social network arena, I'm very interested in print networks and the historical problem of the imprint and how to regularized historical personhood.

Within geospatial analysis, I'm curious about strategies for mapping informal geographical data from early modern text sources.

Collin Jennings

PhD Candidate – English

New York University

I just finished my PhD in the English department at NYU, and I will be starting a two-year Mellon Postdoc in the Experimental Humanities Program at Bard College in the Fall. I work on eighteenth-century British literary and intellectual history. In my dissertation, "Terms of Succession: Ordering the Past in Enlightenment Britain, 1650-1800," I examine how philosophers, historians, and novelists explored different domains and scales of succession (ranging from the "succession of ideas" in the mind to the succession of events in history) in experimental genres that combined fictional and historical features. During the seminar, I plan on analyzing how the language and figures of succession work in different seventeenth-century genres in the EEBO corpus using a range of Python packages, such as NLTK, pandas, and scikit-learn.

In my other digital work, I have explored methods for creating comparative views on how digital and older media manage and represent information. With a collaborator, Jeff Binder, I created the Networked Corpus platform, which represents topic modeling results in the margins of the

modeled texts. In the <u>Networked Wealth of Nations</u>, we produced a comparison between the 18th-century subject index and a topic model of the text in order to examine the different kinds of lexical and grammatical relationships that each form privileges. We have an article describing our technical/theoretical method in <u>Literary and Linguistic Computing</u> and a broader historical article that will be published in *ELH*.

Andrew Keener

PhD Candidate – English

Northwestern University

I'm a PhD candidate in English at Northwestern University, where I've also been assistant director of the <u>Digital Humanities Lab</u>. My research addresses vernacular language-learning, literary translation, and the publication and use of bi-/multilingual dictionaries and grammar books in Renaissance England. John Florio named his 1598 Italian-English lexicon a "world of words," and I believe thinking about Renaissance language in these expansive terms can offer productive new approaches to the period's literature.

I've had the good fortune to publish on some of these topics, but going forward, I'm hoping to condense these "translation dictionaries" into cohesive and useable corpora & to test their relationship to the period's works of literature-in-translation through a series of corpus linguistics experiments. (I've started small with a couple "boutique projects" thus far, but there's certainly room for growth.) Because quite a few surviving copies of the books I'm studying have been annotated by early users, I've also become interested in ways to incorporate inscriptions into these experiments as data. Additionally, I've been leading an effort at Northwestern to report copies of early printed books to the English Short Title Catalogue & to encourage other Midwestern institutions to take up the same goal. Last summer, with a team of four undergraduate assistants, the project reported over 1200 items to the ESTC in just a few months' time.

Lauren Kersey

MA Student – English

Saint Louis University

I'm a PhD student at Saint Louis University with a focus on rhetoric and data science.

Last semester I started a project with other English, Math, and Computer Science students which is building data mining and machine learning tools in the Julia Language. We're using these tools to test different systems of periodization in a cross-genre, historic corpus sampled from EEBO. As a side project, I'm making a series of podcasts to document the project and experiment with using audio as a medium for explaining data science technologies.

Brian Kokensparger

Assistant Professor – Journalism, Media, and Computing

Creighton University

I am an assistant professor in Creighton University's Journalism, Media, and Computing department, teaching computer science and professional writing courses. I am also working with Simon Appleford in Creighton's newly emerging DH initiative. Before jumping into computer science and DH, I had a bit of an eclectic past; I was a creative writing and theatre undergraduate, completed a masters of Computer Science degree, and most recently received my Ph.D. in

Instructional Technology. In addition to doing research in applied linguistics and computer science education, I am currently working on an MFA in Creative Writing. All of this comes together for me theoretically with a fascination with the authoring process and its implications, and with a focus on DH tools, especially those assisting the digital editing and archiving process. I am especially excited about retrofitting tools to do task X that were originally made to do task Y.

My current DH venture is a new project between Creighton University and the Joslyn Art Museum, investigating and presenting the journals of Prince Maximilian of Wied in connection with a rich collection of Bodmer watercolors extant in the archives here. In my dissertation I dealt with corpus linguistics of contemporary student writing; I used LIWC to analyze student texts in relation to our learning management system's pageviews logs. I hope to develop a guided approach by which Early Modern English texts can be created, managed, and curated for a handheld mobile medium -- especially exploring the interactive and audiovisual potentials of the eBook.

Hillary M. Nunn

Professor – English

University of Akron

I'm Hillary Nunn, professor of English at the University of Akron in Akron, Ohio. I teach classes in Shakespeare and early modern literature, as well as an occasional introduction to DH theory and practice.

Just after finishing my Ph.D., I worked for two years at the EEBO-TCP as the project's Outreach Librarian. That experience has come back to me in a big way since getting in involved in the Early Modern Recipes Online Collective (EMROC) in 2012. EMROC is using a crowdsourcing model to create a searchable, encoded corpus of medical and culinary recipes currently available only in manuscript. Our student encoders — on six mostly non-R1 campuses — have been learning paleography and TEI at the same time, and generally doing so with gusto. Until recently, we've been working with the University of Saskatchewan's Textual Communities system, and we are looking forward to transferring to the Folger's EMMO in the coming months.

While the collection offers plenty of possibilities, I'm most excited to explore the social networks among recipe contributors it will bring to the surface. I'm looking forward to learning about the mapping tools available for that part of the project.

Brad Pasanek

Assistant Professor – English

University of Virginia

I'm an Assistant (almost, nearly Associate) Professor in the English Department at the University of Virginia. My book project, a dictionary of eighteenth-century metaphors of mind will be out next month from JHUP: https://jhupbooks.press.jhu.edu/content/metaphors-mind

I wrote my dissertation at Stanford and so owe to Franco Moretti and Matt Jockers my interest in *longue-durée* literary history and macroanalysis. But my book is authored in a playful way in order to dramatize a kind of statistical panic. The point is to think reflexively about the scholarly monograph in the age of Amazon and Google Books and expose The Ways We (Don't) Read

Now. One of my blurbers describes my method as "distant reading by hand," which I like very much.

I'm in Ireland this month as a Fellow at the Moore institute and am studying R and Python, hoping to become a better coder. (Folgerish announcement: I'm going to see a marathon 6-hour production of Shakespeare's Henriad on Tuesday, staged by the Druid.)

My new project, on bigrams and trigrams in the poetry of the late seventeenth, eighteenth, and early nineteenth century, requires some real NLP skills. No more drudging proximity searches for me: I aim to automate some of my analyses and embrace bibliometric and statistical methods.

Links to current projects are collected at <u>bradpasanek.com</u>. More information about my publications can be found at http://www.engl.virginia.edu/people/bmp7e

Don Rodrigues

PhD Student – English

Vanderbilt University

I'm Don Rodrigues, a PhD student in the English Department at Vanderbilt. I just passed exams and am currently working on my dissertation prospectus on early modern organizational systems. Since coming to Vanderbilt in 2012 I've been active in its DH community, having assisted with the formation of its Digital Humanities Working Group and soon-to-be-launched Gaming Studio. I have experience with MOOC design (over three summers, I've worked as technical consultant on the Coursera MOOC, "Online Games: Literature, New Media, and Narrative") and stylometric analysis (my essay on the multi-authored 1601 pamphlet, *Love's Martyr*, was just published in *Conversational Exchanges in Early Modern England, 1549-1640*). This fall, I'll be researching my dissertation topic and other projects in residence at Harvard's metaLAB.

Jason Rozumalski

PhD Candidate – History

University of California, Berkeley

I am a PhD student in early modern European history at the University of California, Berkeley. I have just finished my archival research, which was a truly wonderful opportunity: I spent the past two years cycling and camping archive-to-archive around England, France, Ireland, Wales, and Scotland. But, I've put the tent away and am now beginning to write chapters for my dissertation, which is currently entitled "Lords of All They Survey: Measure, Mobility, and the Rule of Law in Early Modern England". The idea is to use sixteenth-century land law in order to think about the relationship between mathematical thought and legal practice and see their effects on social life and the technologies of authority. As part of that project, I have had an increasing interest in the use of geospatial analysis. Before starting at Berkeley, I did a masters program in economic and social history at King's College, Cambridge, which included a certificate in quantitative social science methodology. I'm originally from rural Wisconsin.

Whitney Sperrazza

PhD Student – English

Indiana University

My name is Whitney Sperrazza and I am currently working on my dissertation, tentatively titled "Perverse Intimacies: Ravishment, Texture, and the Early Modern Literary Body," at Indiana

University Bloomington. In part, my project asks how we as readers come to intimately know early modern literary figures through the mechanics of poetic language and form, which is where my digital interests come into play. My digital work focuses on the texture of poetic language and how that texture contributes to a reader's affective response. The project is still in its early stages, but so far I'm using fairly straightforward data mining tools (like Voyant) to sort texts for specific words and phrases, and am then using fine arts technologies (3D modeling programs and laser cutting) to turn my infographics into physical objects.

Slightly more conventionally, I have also worked as an encoder (XML) on several digital projects at IU - The Chymistry of Isaac Newton project and the newly funded Petrarchive project. I tweet (mostly re-tweet) as @wsperrazza and occasionally post to my blog *spinning with the braine*.

Jacob Tootalian

PhD Candidate – English

University of Wisconsin-Madison

I just last week finished my dissertation on metaphor in seventeenth-century English prose. I became interested in the digital humanities when I took a seminar on digital approaches to literature taught by Mike Witmore at the University of Wisconsin-Madison. My project for that course used DocuScope to study linguistic modes in Shakespearean drama, and it turned into an article titled "Without Measure: The Language of Shakespeare's Prose." I've since been using tools like DocuScope in my dissertation research on seventeenth-century prose genres. I'm hoping to revise and expand that project into a book focused in particular on the language of natural-philosophical treatises and tracts. I am also the co-director of the Digital Cavendish Project, a developing online project that hosts scholarly research and resources on the work of Margaret Cavendish, and I'm currently teaching at the University of South Florida.

Erica Zimmer

PhD Candidate – Editorial Studies

Boston University

For the past several years, I've been developing a digitized model of the bookshops and stalls surrounding Paul's Cross Cathedral in the period before the Great Fire. I'm pleased to be working with several collaborators to this end, including members of the UK web company Neontribe eager to help realize the project's potential for scholarly and public engagement.

As a Ph.D. Candidate within The Editorial Institute at Boston University, my focus is intertextuality, with an eye to media change. My dissertation engages the work of a modern poet deeply influenced by early modern literature and culture, and I've been using computational as well as more conventional methods to explore patterns in his corpus. With my EMDA13 colleague Douglas Duhaime, I've also been extending these studies more broadly.

More recently, moving between human and computational frames of reference has expanded my use of mapping and data visualization, including some exciting work this past week with the *Digital Mitford* project.

Technical Assistants:

have.

Eric Alexander PhD Student – Computer Science University of Wisconsin-Madison

I am the other Technical Assistant for EMDA, specifically the Technical Assistant for Software and IT. I am the person to whom you should direct queries about getting software to run, getting access to online materials, etc. Please don't hesitate to approach me with any questions you might

When not wearing my Technical Assistant Hat, I am also a PhD student in Computer Sciences at the University of Wisconsin-Madison. I work on the Visualizing English Print (VEP) project, along with a number of other EMDA folks. My work has focused on text visualization. I am primarily interested in or ability to use visualization tools to make statistical models of text comprehensible for use in exploration and discovery within the humanities. To this end, I have been working on a number of visualization systems, including Serendip, a tool for exploring topic models built on large text corpora.

Deidre Stuffer PhD Candidate – English University of Wisconsin-Madison

I'm an English graduate student at the University of Wisconsin-Madison. I study 18th-century British Literature, specializing in the history of the English language; the history of reading and writing technologies (lately I have fallen in love with Early Modern English vernacular bilingual dictionaries); and materiality. Currently I'm collaborating with the Visualizing English Print Project.

Invited Faculty

Ruth Ahnert Lecturer – English Queen Mary University of London

Sebastian Ahnert Royal Society University University of Cambridge

Research Fellow – Physics

We are Ruth and Sebastian Ahnert. We have been collaborating together for about three years, using quantitative network analysis to examine Tudor letter collections. We also happen to be married.

Sebastian is a Royal Society University Research Fellow at the Department of Physics, University of Cambridge. Ruth is a Lecturer in Renaissance Studies in the Department of English at Queen Mary University of London. After talking for some years about overlaps in in our thinking about (literary) communities, we decided to see if there was anything in it.

Sebastian, amongst other things, works on network analysis, focusing both on method development and on interdisciplinary applications of network analysis to biology, the humanities, and social sciences. He has numerous publications on weighted and directed networks, growth

models for regulatory genetic networks, and neural networks. He has also successfully applied network analysis to the chemistry of food and flavour, published in *Scientific Reports*, which attracted media attention, including features in *Scientific American, BBC Knowledge Magazine*, the *Huffington Post*, as well as newspapers and magazines in America, France, Germany, Denmark and Singapore.

Ruth's work focuses on the literature and culture of the Tudor period, with a specific emphasis on religious history, prison literature, and letter writing. Her first book was *The Rise of Prison Literature in the Sixteenth Century* (Cambridge University Press, 2013), and she guest edited a special issue of *Renaissance Studies* journal entitled *Re-forming the Psalms in Tudor England*, which is out in September. She is also at work on an edition of *The Letters of the Marian Martyrs* with Thomas S. Freeman. She is about to start a Stanford Humanities Center Fellowship, and has also been awarded an AHRC fellowship to work on 'Tudor Networks of Power', a collaborative project with Sebastian, that applies quantitative network analysis to the study of the Tudor State Papers archive. This builds on earlier work they undertook on an underground Protestant letter network dating from the reign of Mary I, published in *Leonardo* and *ELH*.

Alan Famer

Associate Professor – English

The Ohio State University

I am an Associate Professor in the English Department at Ohio State University, where I work on early modern drama, early modern news, and the history of the book. Often working with Zachary Lesser, I've written several studies of the early modern book trade and the publication of playbooks, in essays that typically include a fair number of charts and graphs and focus on what I like to think of as "bibliographic big data" (in addition to English, I also majored in business as an undergraduate). Zack and I also created *DEEP: Database of Early English Playbooks* <deep.sas.upenn.edu>, which is an online searchable database of all English printed drama from the early sixteenth-century through 1660. We're currently in the middle of a fairly substantial update to *DEEP*, which I'd be more than happy to talk about at the conference if anyone is interested.

Lisa Gitelman

Professor – Media and English

New York University

I'm going to be helping facilitate one of the opening sessions and will be joining you for the first couple of days only (with regrets). I'm on the faculty at NYU, where I am in the English department and the media studies department. My work is on media history, and I have done some recent work thinking about the historical roots of the digital humanities as well as about the data concept as it has evolved to prominence in this, the era of "big" data. I would say I'm an enthusiastic observer of all things DH and the early modern, with a particular interest in historical epistemologies or how we know what we know. Right now I'm in Worcester, MA, for a conference at the American Antiquarian Society called Digital Antiquarians.

David Hoover

Professor – English

New York University

I am David Hoover, Professor of English at NYU. I started out as half a linguist and half a medievalist, with a degree in English Language from Indiana University. After publishing my

first book on Old English meter, I turned to linguistic approaches to style and wrote a book on William Golding's *The Inheritors*, edited a collection of linguistic stylistics essays, and, more recently (2014), co-authored *Digital Literary Studies: Corpus Approaches to Poetry, Prose, and Drama* (with Jonathan Culpeper and Kieran O'Halloran).

I have been doing computational analysis of literature since the early 1980's. Recently, I have been working mainly on 19th and early 20th century American and British literature. Inspired by John Burrows's Busa Award lecture in 2001, I began writing Microsoft Excel tools for literary analysis, one of which I'll be showing you. My current book project investigates the styles of seven authors who changed their modes of composition either temporarily or permanently for a variety of reasons during their careers (handwriting to dictation, handwriting to typing).

Jonathan Hope

Professor – English

University of Strathclyde

I'm Jonathan Hope, and I teach at the University of Strathclyde in Glasgow, Scotland.

My main research interest is Shakespeare, especially his language - and in recent years I've become increasingly involved, with Mike Witmore, Director of the Folger, in using computers to explore that language. We are currently working with Mike Gleicher (Computer Science and Data Visualisation at Wisconsin-Madison) on a Mellon-funded project to provide scholars with tools and techniques to access and explore the EEBO-TCP texts (and any other large body of texts). You'll hear a lot about that during EMDA.

I'm also interested in modern experimental writing, and book history. I tweet as @wellsheisnt (a B52s reference, music fans). Mike Witmore and I have a blog - winedarksea.org - from which you can download various papers of ours, should you be so minded. For a short, fun read, here's a thing we did for the Tumblr supporting the Globe's current world tour of _Hamlet_: http://globetoglobehamlet.tumblr.com/post/84210842638/hamlet-in-five-words-by-jonathan-hope-michael

Laura Mandell

Professor – English; Director – Initiative for Digital Humanities, Media, and Culture Texas A&M University

I am Laura Mandell, Director of the Initiative for Digital Humanities, Media, and Culture at Texas A&M University, and Professor of English specializing in British eighteenth-century literature and British Romanticism. I am Director of ar-c.org and 18thConnect.org: ARC supports digital communities like 18thConnect which aggregate period-specific, scholarly-quality resources, basically serving as online finding aids and peer-review communities for digital editions and archives. With a team at TAMU in the IDHMC, I work on the eMOP or early modern OCR project: we are attempting to make early modern texts available at scale, supplementing what the Text Creation Partnership has been able to hand-type of EEBO and ECCO with machine-typed, OCR'd texts. I specialize in women's poetry of the eighteenth-century and Romantic era, and I'm general editor of the Poetess Archive. My book called *Breaking the Book: Print Humanities in the Digital Age*, will be out next week, I think.

Tony McEnery

Professor – Linguistics and English Language Lancaster University

I am Tony McEnery, Professor of Linguistics and English Language at Lancaster University. My principal focus is upon the study of language, or more generally at research questions rooted in language. Typically I do so on a large scale, using corpus techniques to explore and account for large collections of material that would defy 'hand and eye' analyses. I have been working on these large text collections, which we call corpora, at Lancaster for over 25 years now. In that time I have had to adapt - back in 1990 'large' was 1 million words. Nowadays 'large' is one billion words and up, I guess. That changing context has kept research fresh for me - because as the dataset grows, my experience has been that the challenge does not simply get bigger. It changes, and entirely new ways of looking at data and understanding language present themselves. That has proved to be one of the chief pleasures of the last quarter century for me!

Throughout my work, my goal has never been to replace or even replicate the work of expert human analysts - I think that is quite beyond us at the moment, at least in whole. Rather, my goal has usually been to make non-tractable problems tractable. So, if we want to explore a topic in a billion words of texts, how can I guide and narrow the work of the expert analyst so that they can begin to make sense of so much data? Another way to look at it is how can we guide the expert to the right point in text collections where their experience and analytical expertise can be used for maximum effect? Corpus techniques are very good at just this, allowing analysts to cycle between close and (so called) distant reading in an attempt to gain a deep understanding of a large text collection (or large speech collection). They are also very good at surprising the analyst with results from the dataset that they would never have imagined were in there!

This overall approach to the study of questions rooted in language has guided much of my academic career - it has led me to take degrees in linguistics and computer science, to look at language through the centuries, to think about what methods of language analysis in such a context mean and may be and it has kept me terrifically busy.

My engagement with literature has mainly been through working with folk a bit like David Hoover. Corpus stylisticians such as Jonathan Culpeper, Elena Semino and Mick Short have, from time to time, worked with me on a range of issues of relevance to literature, most notably in speech and thought presentation.

Andrew Prescott

Professor – Digital Humanities

University of Glasgow

I'm looking forward immensely to meeting everyone in Washington next month. I am Professor of Digital Humanities at the University of Glasgow, but spend most of my time engaged with the 'Digital Transformations' strategic theme of the Arts and Humanities Research Council, the major arts and humanities funding body in the UK: http://www.ahrc.ac.uk/Funding-Opportunities/Research-funding/Themes/Digital-Transformations/Pages/Digital-Transformations.aspx.

I trained as a medieval historian, working on the records of the Peasants' Revolt of 1381 in England. This led me to become deeply entangled in the history of archives and libraries and the way in which they mediate our engagement with the past. I have written on the history of many

different libraries and archives, ranging from the library of Sir Robert Cotton to the archives of masonic organisations. With such a strong interest in the way in which libraries function, I was naturally fascinated by the growth of network and digital technologies in libraries in the 1980s and 1990s, and it was this route that led me into the digital humanities. I have a particular interest in imaging of manuscripts and archives, and was closely involved in the pioneering 'Electronic Beowulf' project, edited by Kevin Kiernan.

I tweet as @ajprescott and I have a rather intermittent blog at digitalriffs.blogspot.co.uk.

Paul Schaffner

Senior Associate Librarian

University of Michigan Libraries

I'm Paul Schaffner, medievalist/linguist turned lexicographer turned librarian. You'll notice that none of those say "early modernist." My early modern interests are unfocused, personal, and may be guessed at by some of the old books I've purchased over time: George Herbert, Philip Sidney, Richard Baxter, Beza's Latin NT, and (last week) John Bois's notes comparing the Vulgate to Beza, Piscator, and other 'modern' Latin translators.* I tend to gravitate toward jobs like librarian and lexicographer that reward the amateurish yard-wide-but-an-inch-deep approach.

I did my undergraduate work at Haverford and Bryn Mawr Colleges (a grab-bag of languages, plus theology) and at the Universities of Pennsylvania (paleography and Welsh) and Cambridge, receiving a BA in early English from Haverford and an MA in Anglo-Saxon, Norse and Celtic from Cambridge, followed by a PhD in Medieval Studies (Philology) from Cornell and an MLS from the School of Information at the University of Michigan.

I came to Michigan in 1989 to join the staff of the Middle English Dictionary where I served as a lexicographer for eight years. In 1997 I moved to the University Library to manage the production of an electronic version of the MED and the other components of Michigan's online Middle English Compendium, moving on in 2000 to manage other e-text projects, especially EEBO-TCP and its siblings, which have occupied most of my time for the past sixteen years, during which about 70,000 TCP transcriptions have passed through my hands. In my spare time I constitute the entire tech-services department of the Jackson (Michigan) Community College library and catalogue (in XML of course) my own accumulation of 15,000+ books (hymn books and hardware catalogues!) and old hand tools.

[*Bois, I believe, was one of the six members of the final review committee for the KJV.]

Jan Rybicki

Professor – English Studies Jagiellonian University in Kraków

I'm Jan Rybicki of the Institute of English Studies, Jagiellonian University in Kraków. I also taught at Rice University in Houston. In my research, I've been combining translation studies, comparative literature and computational stylistics to produce quantitative and qualitative analyses of literary language in the original and in translations. I've authored a number of publications on the stylometry of increasing textual collections and on individual authors such as Sienkiewicz, Woolf, Conrad, Ford (the former two with another Folger Institute guest, my guru David Hoover), on stylometric methods themselves, and on the visibility of various signals: author, co-author, editor, translator, gender, chronology in multilingual literary corpora. For my

sins, I'm on the Executive Committee of the European Association for Digital Humanities. In my previous lifetime I've translated some 30 novels into Polish by authors such as Amis, Coupland, Fitzgerald, Golding, Gordimer, Ishiguro, le Carré or Winterson.

Studio NAND

Stephen Thiel Designer; Managing Director

My name is Stephan Thiel. I'm a designer and managing director at Studio NAND, a design company in Berlin which I have co-founded in 2011. We work together with companies and public organisations and help them putting (their) data & technology to use through visualization and design. We also regularly teach people how to do this on their own in hands-on workshops. Something which I additionally enjoy doing as part of Start Coding, a German non-profit I have co-founded supporting computer science in education.

When I am not working at NAND, I like to explore new approaches to data analysis, visualization and user interfaces in collaboration with researchers in the Digital Humanities. This started with my BA on visualizations of Shakespeare's works based on WordHoard (http://www.understanding-shakespeare.com) which led to a long-term collaboration with Tom Cheesman (Swansea University), Jonathan and Jan et al. on the visualization of re-translations of Othello (http://delightedbeauty.org/vvv) and several new interface prototypes of this data as part of my MFA (e.g. http://is.gd/transvis20).

Rebecca Welzenbach Outreach Librarian – EBBO-TCP University of Michigan

I am (among other things) the outreach librarian for the Text Creation Partnership. Based at the University of Michigan Library, I work closely with Paul Schaffner on the creation of the Early English Books Online-Text Creation Partnership (EEBO-TCP) texts. My role these days consists mostly of responding to individual queries about the TCP and sorting out confusion about legal agreements and restrictions (and lack thereof!) affecting the texts at any given point. In the past when I was on this project full time, I spent more time communicating with librarians at individual universities and representing the TCP at conferences and other events, with the aim of educating people about the project and encouraging libraries to join the project as partners.

I followed EMDA 13 with great interest from a distance, and am so pleased to have the opportunity to participate in person this year, though unfortunately I can only be with you at the Folger on Tuesday, June 17.

Owen Williams Assistant Director – Scholarly Programs Folger Institute

I am the Folger Institute's Assistant Director for Scholarly Programs; I welcome some two hundred advanced scholars to the Folger each year to take advantage of collaborative topical programs with very smart and generous colleagues. Here's the coming year's line-up. The Institute also offers residential fellowships, programs for undergraduates, and multi-year scholarly collectives to take up ideas that are so complex they require more sophisticated exploration.

I hold the Ph.D. in English from the University of Pennsylvania after my wayward college years as a classics major focusing on the plays of Aristophanes. My current hobby is an M.S. in instructional systems and learning technologies. I tweet (sporadically) as @owilliamsdc if you want to connect in advance of the institute.

I am currently involved with several Folger projects about which you will hear more in coming weeks: A Digital Anthology of Early Modern English Drama and Early English Manuscripts Online are the most prominent. Those wiki articles are available on a platform called Folgerpedia, and we'll be using a private wikifarm associated with it to develop ideas and possible articles in a walled garden.

Early Modern Digital Agendas: Advanced Topics

Directed by Jonathan Hope

June 2015

QUESTIONS TO WHICH THE PARTICIPANTS WERE ASKED TO RESPOND:

Summarize your overall assessment of the experience and the effect you anticipate it will have on your teaching, scholarship, and/or development of digital projects.

Evaluate the effectiveness of the approach with respect to engaging participants in both critical discussion and hands-on interaction with digital collections and tools.

Comment on specific aspects of the program that were noteworthy to you, such as the director, visiting faculty, colleagues, topics, organization, discussions, and activities.

Evaluate the appropriateness of the scope, including the range of topics and tools addressed during the two and a half weeks and their relevance to early modern studies. Describe any topics or tools you found especially useful that should be emphasized in future programs.

What kind of space, tools, and technologies do you use in your work and scholarship? Did the Folger adequately provide these for you? What should we consider providing to future participants?

What sort of new or renewed partnerships do you see coming out of your participation in this institute?

What would you like to see the Folger including in its future digital agendas? What kind of work would you like to do with the Folger, or see the Folger take on? (You are welcome to suggest topics for future seminars or institutes, names of potential directors, and relevant initiatives that you see coinciding with our larger mission.)

Evaluate the Folger Institute as a host, particularly with respect to meeting space, hospitality, housing arrangements, the suitability of library facilities, computing and technical issues, and other relevant aspects.

What suggestions do you have for future scholarly communication and how can the Folger help facilitate it? Discuss how program faculty and the Folger might facilitate future collaboration and follow-up discussion among participants.

What suggestions do you have for the afterlife of Early Modern Digital Agendas?

Do you have any further comments on areas that are not covered in the above topics?

EMDA was a rich, engaging, challenging and unique experience, and one that I believe will inform my research and teaching for at least the next couple of years.

For my research, it has given me new knowledge and confidence in drawing on digital approaches and tools for two new projects I'm embarking on—essentially pushing me out of my previous comfort zone and encouraging me to be more ambitious and to use digital resources across the spectrum,

rather than sticking to known methods or tools for particular parts of my investigations. It will also inform a future research grant application, which will include a digital component for literary editing and textual analysis. Now I have a better understanding of the state of the art, this can push at the boundaries of what has been done before. Likewise it helps inform how I discuss my thinking and methods with colleagues in early modern studies from different disciplines, in terms of their expectations and understandings of important issues and techniques.

For my teaching, I plan on incorporating digital tools, and the theoretical and methodological questions they raise, in my undergraduate and postgraduate teaching. Importantly, this will not only be in DH-specific modules, but rather integrated into general modules in the degree programs I'm involved with. DH is not going anywhere, and it is important that students are sufficiently digitally literate, regardless of whether they are pursuing a future academic career or going out into the non-academic workplace. Bringing DH to bear on language and literary studies is a significant part of this literacy, and one I also believe they will find interesting and challenging.

The hands-on aspect of EMDA was excellent. By building in tasks, making us download the software and experiment, it ensured that we had to engage, practically, with the software and collections. This involved slightly more complicated computational work than I'm used to, but it has made me more confident as a result. Having the two support staff members, Eric Alexander and Deidre Stuffer, was invaluable, as was having faculty staff to interact with. The critical discussion was very thought-provoking, although it perhaps only gathered momentum towards the second half of the program. This was probably because we were focusing on using the new methods and tools, which meant the scope for critical reflection was reduced. Indeed, the event was quite intense—even with the generous lunch and coffee breaks. I wonder if making specific sessions reading-focused with discussion and arguments (either in break-out groups or as a whole) would have been useful. The intensity of the schedule and the amount of new knowledge meant that we didn't always have sufficient mental space to process the implications until a day or so after the session—by which time we'd moved onto something new. That said, I enjoyed the hands-on approach, as it's something I don't get chance to do very often (that is, be taught such techniques and information), and this proved a useful contrast in that sense.

There was not a single session that I did not find somehow useful or informative. However, those of most merit were the sessions with greatest salience to my research, and with them the heavy-weight faculty that were involved in those sessions. This includes David Hoover, Jan Rybicki, Heather Woolf, Ruth and Sebastian Ahnert, and Andrew Prescott. Having the faculty around for longer than their specific sessions was a great help, and served to sustain discussion and encourage debate around different topics. Laura Mandell was brilliant, too, in that regard.

The whole institute was exceptionally well organized, without fault, and the structure of the sessions ensured that the participants were able to interact and get to know one another. Feeling comfortable about discussing ideas and opinions is very important to a program such as EMDA. The practical sessions (those without computers) were also very useful—namely the modeling-clay and the "draw a visualization" tasks. These got us away from our computer screens, and forced us to think critically about why we go about things the way we do in DH.

The EMDA curriculum was very carefully planned and thought through, with a clear and appreciable learning curve across the two and a half weeks. The first sessions, on data creation/curation, may have lacked the excitement of the second week on analysis, but actually proved incredibly helpful in covering some key concepts, assumptions, and criteria for early modern digital work. The knowledge of EEBO-TCP and EMMO, in particular, will inform how I go about data creation and collation in the future. An insider's view into these DH resources is something that should be core for any DH session, I think. Making it built-in to the curriculum ensures it cannot be dodged, and therefore its merits appreciated.

Regarding tools and topics, the sessions engaging with code and command lines were more revelatory for me—although I appreciate some people had much more experience in programming languages than I do. However, it's important to see how this relates to our work, and how questions about data creation/collation inform the tools we use. Grappling with iPython and R are both areas I intend to develop further, as they have clear potential for my work. I would not have attempted to use them, I don't think, without EMDA.

The breadth and depth of EMDA was challenging and, as with any session that tries to cover a lot of material, sometimes areas were covered in slightly less depth than I would have liked. See also my previous comment on critical discussion. However, on reflection, I'd rather have a lot of information, and process it afterwards, than too thin a program (especially since our interests were diverse and not everything was relevant to everyone). It's a tricky balance to achieve, but EMDA just about did it. I have 25,000 words of notes to prove it!

The Folger provided an excellent research space for the institute—with plenty of plug sockets, coffee and the opportunity to use the Reading Room when not in session. This was entirely adequate. The Dropbox was an effective location for the readings and software. There was sometimes a bit of confusion of locations of software, what we needed and likewise—perhaps a USB or a dedicated download site of tools/data, distinct from the reading materials, would be helpful here (i.e., Github).

I hope to continue my discussions with several of the EMDA participants, and in the medium to long term, turn these discussions into collaborative projects and publications. I also hope to return to the Folger, perhaps on a short-term fellowship if I'm lucky enough, so that I can build on my preliminary work in the reading room conducted during EMDA. The institute opened my eyes to a very unique and rich research community, and the number of scholars with complementary interests and expertise to my own research. I want to continue these conversations, and also make connections between EMDA participants and other colleagues.

There is a current push towards networking DH projects—that is, creating a resource (and a discourse) that connects and interlinks the myriad resources underway. I know Laura Mandell has ideas about this, and it seems to me that as DH develops, places like the Folger who are experts in documentation and synergy within traditional collections would be ideally placed to foster new ideas and movements towards their digital equivalents. There is still a sense that a lot of digital projects are unknown, or lost due to sustainability issues. While we touched on these issues briefly, they themselves offer rich areas for discussion and, I would hope, the prospect of some solutions.

I think there is also scope to look at how DH can enhance non-academic engagement with early modern language and literature—as well as non-literary scholars within the academy. More collaborative and interdisciplinary discussions and perhaps mini-projects (linked to institutions, heritage groups, or otherwise) that advance thinking and methods around the use, display or interpretation of EM documents and resources, could be exciting and innovative. The core of projects like EMMO seems to be the starting point for these kinds of things that can be expanded on and experimented with. It should go without saying that I would love to be involved with EMDA/Folger-related activities in any capacity!

As a host, the Folger Institute was wonderful. They are exceptionally organized, with nice touches such as the Metro SmarTrip card, and lots of information provided early on regarding the schedule, travel etc. The library is amazing (obviously), and the support of IT, as well as the EMDA-specific assistants, was very useful and made for a stress-free event. The one less ideal part was the accommodation, which was obviously not at the Folger. This was somewhat utilitarian, with a few rodent and pest-related issues. But I appreciate that it is difficult to negotiate a balance between quality and cost when the institute is three weeks long. All in all, everything was very good.

We've already set up a Facebook group, alongside the EMDA listserv, and we will be contributing to the internal and, hopefully, external wikis associated with the Folger. We have also discussed panels at conferences, and hopefully the communication resources will allow us to identify suitable events over the coming year.

Given our geographic diversity, I'd be interested in web-based events, perhaps linked to themes or topics in EMDA (e.g., metadata, visualization, authorial style), that would be a low-cost way of sustaining more formal conversation, alongside these other methods. If these were led by faculty, it would help promote our involvement. We have also discussed exchanging datasets, so perhaps mini-projects linked to people using the same data, but in different ways, or applying the same tools to different data, could be of interest. What was effective about the EMDA participants was the breadth of interest and expertise, and it would be good to promote this in future discussions. Of course, supporting on-site meetings is invaluable—the guaranteed reunion next summer changes, I think, how we view the event as we know that we'll all be meeting face-to-face, and thus encourages us to view our relationships as long-term, not short-term and temporary.

In addition to Folgerpedia (and the in-house equivalent) articles, I'd be interested in working towards a more traditional publication, should there be a theme or discussion point that would offer a coherent bridge between our different projects. This would offer EMDA a more formal profile, and also encourage participants to view it as integrated and on-going in our academic careers. Given that the participants were mostly doctoral or early career, this would potentially offer a valuable contribution to research profiles, too.

The only thing left to say is that EMDA was perhaps the best three weeks of my academic career so far—and that includes getting my Ph.D. It was a wonderful, affirming, and provocatively challenging experience that has boosted my enthusiasm for academia, and given me new confidence in my research. I'm exceptionally grateful for the opportunity to attend, and to be able to pass on many of the insights and knowledge gained to my colleagues. I will be travelling to another institution (not immediately local) at the end of summer to discuss my experiences and share knowledge of particular sessions, as well as disseminating in my own university.

EMDA showed us so much in so little time, and I appreciate all of it. Because of the wide range of topics, some were of more immediate use than others, but I also have a better plan for moving forward with my own research—and I know more about how to clean up my data to make that possible. So, in short, even though it's many steps away, I know how my research will benefit, and I know how important it is to make my data plain to others in the meantime.

As far as teaching goes, this has had a huge effect. The seminar's fearlessness in providing many tools to work with, even when there were at times known issues with those tools, was liberating. Teaching in a workshop format like that is something I've not done, but now feel much more comfortable doing. And I have more tools to use in those situations now, too.

The hands-on interaction was incredibly helpful, and I'm so glad we had technical support. Otherwise, I don't think many of us would have had nearly as much success. Speakers had different levels of comfort with the format, but that was no problem. Two days for OCR was a bit much, and more on R would have been helpful. But on the whole, aside from that rebalancing, the hands-on sessions were very effective.

I expected more conversation in the sessions, about larger issues involved in digital projects. Most speakers were very open to answering questions, though often these were about important details

rather than bigger pictures. Ted Underwood asked us what we thought about theoretical questions, and Alan Farmer apologized for sounding (he feared) like a Luddite, but by that point in the seminar, our attention was largely on daily approaches.

Avoiding the automatic jump to theory is completely understandable, but there were unspoken theoretical underpinnings to what we read and talked about that could have been further explored. What are the consequences of creating fresh texts for every project? If using only first editions in the EEBO-TCP is a problem, then isn't there also a problem in using a single *Hamlet* in other projects? Of course the projects should be done, but how can that problem of transparency be approached so users and readers can trust the data? Those are practical questions I wish we'd worked with. Also, what are the consequences of asking "old" questions with new technology? Authorship issues are traditionally important in literary studies; what are the effects of bringing them to prominence again, with digital tools, when collaboration is of new interest?

First, colleagues: they were all fantastic, and I learned from each and every one of them. The range of projects was amazing, and I hope that's something future EMDA programs can reflect.

The visiting faculty members were incredibly generous. We had a wide range of personalities and backgrounds, and each of them brought in valuable ways to help us think about our own interests. There was some well grounded concern about gender representation among visiting faculty, and I don't want to inflate that or undercut it. It strikes me as something that DH will always be dealing with, until Girls Who Code magically solves imbalances in technical fields, but it would be helpful to make sure that biases in "old" scholarship (as categorized with the grand gesture above) don't have to be cycled through when newer tools are introduced. I also know this is easy to point out now, and difficult to prevent, but I had to say it.

Jonathan did a great job keep us on task, and the sessions he ran were among the most informative (and fun, even though the Play-Doh was not always cooperative). I appreciated the sports updates as well.

The first week seemed geared to understanding the data and how it came to be; the second was more about what can be done with that data, and how to do it. A theme winding through the end of week one and beginning of week two was our interactions with books currently in print form; that would be helpful to address in a more head-on way, I think, to help underscore the ways that digital projects still connect to often overlooked scholarship done a hundred years ago. So, more Alan Farmer would be good.

The Folger librarians were fantastic, and having more of them would be helpful, too. It would be great to have someone tell us how cataloging actually works now and how it might have worked in a rare book collection one hundred years ago. Many seminar members were dissatisfied with the metadata in EEBO and EEBO-TCP, but why is it like that? Perhaps having someone from the LC come to talk about the why and how of subject cataloging might be helpful.

I had everything I needed, except more time! It would have been nice to have access to the CUA fitness room (don't laugh—it really helps me think), but otherwise everything I needed was provided.

The institute has helped me connect to the Folger itself, and that's invaluable. I also know that I'll be in touch with others in the seminar at future conferences—I already discovered two overlaps in my fall schedule—and I'm hoping to work on a women in science project with another.

Visualization could be a seminar on its own; I also think that sustaining projects could be a topic, though it's a different sort of practicality (Andrew Prescott really got me thinking there).

Working with EMMO is definitely something in my future, and I think the sorts of collaboration it enables could be the focus for a new EMDA. The idea of collaboration in humanities fields is rather new, and it calls for new modes of evaluating scholarship (something that I'm glad to see Laura Mandell is working on). Perhaps the Folger or *Shakespeare Quarterly* can take a role in those efforts.

As for future directors, I know Julia Flanders was on faculty last time, and it would be great to have her there again.

The Folger provided us with everything we could have needed, and everyone was thoughtful and generous. The three parties were well timed, and Jonathan was a great host. I definitely appreciate Owen's asking for beer feedback as well.

The dorms were what I expected, and I would say to work a future contract (if fitness room access could be added and the mouse subtracted). The area had almost everything we'd need, and the walk was much appreciated.

The library facilities were fine, and well located for tea. And your magnolia tree was magnificent the whole time.

Several of the faculty members are involved in projects that could benefit from having EMDA people as collaborators—whether it's entering content regarding early modern letters, or working with the idea of standards for early modern projects. I wonder if EMDA and ReKN can work together in some organized way?

I'm glad there will be a reunion, and it's good to see the Facebook group going. But aside from meeting at conferences and smaller collaborations, I'm not sure. If there were projects that came out of EMDA13, having a mini-conference of their work and whatever comes of ours would be pretty great.

The only other comment I have is that I had a fantastic time, learned a great deal, and hope you can do this again.

My participation in EMDA has been transformative. New avenues of research have been opened up for my work, and I developed new ideas for my upcoming courses.

The approach was great, though more hands-on would have been valuable. It would have been nice to split into groups and train on an agreed-upon technology over the 2.5 weeks, under the leadership of one of the faculty.

The support staff was fantastic. Faculty that were hands on and discussion oriented were excellent. The lecture based presentations were less interesting.

I have agreed to collaborate with several participants on new research.

At times, I felt like the space itself was a bit constricting.

EMDA was a tremendously productive and fascinating program for me, from beginning to end. The thoroughgoing mix of rigorous, day-long sessions with informal conversation, as well as the considerable duration of the program, supplied me with lots of opportunities to learn about and absorb new approaches to old problems. EMDA gave me useful background in EEBO-TCP, data curation, etc.; I expect also that the more solid grounding I now have in quantitative approaches will offer new angles at

the topics I am researching. After discussion with one of the EMDA faculty members, I also have a better idea about integrating a pedagogical dimension into an ongoing research effort I've been running as well. In short, I'm confident that this program will have a considerable and useful bearing on my research and teaching.

For me, EMDA stood firmly upon a useful mix of theoretical and practical approaches. This balance, I've come to think, is essential to any digital agenda in scholarship.

Overall, I wound up seeing Jonathan's clay-and-skewer 1D, 2D, and 3D building exercises as a sort of fulcrum for the program, since it encouraged us to understand the digital approaches we're taking in material, physical terms. I think that the frequent references to "books" or "words" as the units of study reinforced this in my mind, and the readings helped to do this as well. (The readings were a great list altogether, and I'll surely be returning to or repurposing some of it.) I would have preferred some time actually looking at items in the Folger's physical collections as part of the program, however.

I found the way in which many instructors slowed down their "lectures" in order to walk us through digital tools step-by-step to be very effective. Laura Mandell, Jan Rybicki, and Sebastian and Ruth Ahnert were particularly excellent in this respect, though to my view each instructor was attentive to how the participants were proceeding. This hands-on dimension made the sessions interesting and lively.

Finally, I have to commend Deidre Stuffer and Eric Alexander, who provided excellent support for numerous unexpected technical issues. They really allowed the program to move along as planned.

Especially noteworthy for me was the period during which Jonathan Hope, Mike Gleicher, and Mike Witmore explained the contours, methods, and goals of Visualizing English Print. This was a real centerpiece to the program. Hearing more about this project, which I'd heard about and had read about in a somewhat cursory manner, led me to consider—for the first time, I believe—some of the major implications for computational approaches to Renaissance literature, namely what Principal Component Analysis can do, how Docuscope works, and what looking at hundreds of texts in hundreds of dimensions can do for the study of literature. I'd been persuaded about the benefits of these methods before, but now I feel more confident explaining them to others. I already have on several recent occasions, in fact. In addition, having Mike Gleicher and Mike Witmore in attendance for several sessions beyond this one was immensely helpful to me; their comments (I remember Mike Witmore saying "We're about at the level of detail now where our disciplines [i.e., Computer Science and English] have trouble communicating") cleared up difficulties and anticipated a lot of questions I had. Having Heather Wolfe, Paul Dingman, Mike Poston, and other Folger staff in the room improved the quality of discussion as well, beyond their excellent presentations.

The Python portion that Ruth and Sebastian Ahnert presented together stands out as another key segment in EMDA for me. This was in part because it was particularly challenging. Although I was able to grasp the general principles of what network analysis can do, I found it difficult to make the conceptual jump from a very small data set (such as those we practiced with) to a large one. I suppose that comes with time, and it may be that my research doesn't currently require that sort of approach. However, understanding the basics here constituted an important part of the overall program, and I certainly wouldn't leave it out. Talking with Ruth and Sebastian was immensely helpful, not least because their collaboration across disciplines models something important for all of the participants.

I'm also very glad that Andrew Prescott insisted on a tour of the Hinman Collator. Great practical example of how technology in the humanities generally and Renaissance scholarship specifically has a long history!

I think the first day with Lisa Gitelman offered a solid foundation for much of the discussion to follow, and that it sufficed. Perhaps other participants desired more theoretical discussion, but I was quite satisfied. The remainder of the first week—with EEBO-TCP, OCR/Tesseract, and EMMO, among other things, carried a good deal of hands-on work (some of it was a lot to handle at once, particularly the Tesseract). Perhaps the data curation lesson from Trevor Munoz and Erika Farr could have preceded the OCR portion? I recall that many participants were startled by what Trevor Muñoz and Erika Farr said, and perhaps there'd be a way to lessen that shock, or to fold in the key points more gently?

I found that the book history / short title catalog segments by Goran Proot and Alan Farmer were a good complement to the stylometric approaches that Jan Rybicki and David Hoover presented. Specifically, I mean that the sum of approaches in that second week encouraged reflection upon very sophisticated, established principles/resources in the field while also promoting examinations of new, exciting methods. This balance strikes me as being of critical importance for practitioners of "digital humanities" generally.

Along with some of the portions on stylometrics, Mike Gleicher's presentations on visualization contained the most new and most complex material for me. For this reason, I found myself copying down much of the text in his PowerPoint slides. In retrospect I realize I should have been more selective in my note-taking, since I may have a hard time extracting the key take-aways later on. That said, most of the general, conceptual points stuck, and together with Stephan Thiel's portions on visualizations, I have a better idea of options and approaches. The book *Understanding Comics* is on my reading list.

Finally, for tools: learning to use Ubiquity was a huge take-away for me. I'm not certain Tesseract will be practical for the large-scale materials I'd need to process. Perhaps VARD could receive some attention, maybe 30 minutes or so, during the program? I've found it to be a really useful tool and although we mentioned it several times, we didn't really get into it on a practical level.

I use physical libraries—reference books, stacks, Special Collections, to name a few—in both my research and teaching. In fact, I tried to make time to use the Folger's physical collections here and there while I was in Washington, on weekends and in mornings before EMDA. Libraries at my home institution offer a kind of "home base" for the sort of collaborations I've been inclined to take up with librarians, students, and scholars in other departments. EMDA reinforced my commitment to both libraries (Andrew Prescott really emphasized the necessity of this, I think) and to collaboration with people working on analogous topics. During EMDA, I really found great value in collaborating with people working on the eighteenth century and later, and this surprised me.

To reiterate an earlier point, I think integrating some physical collection materials from the Folger could drive home the libraries point with even more force. This would also have the benefit of moving the group out of the basement from time to time (I suppose the Deck A seminar room is slightly too small for everyone, but perhaps there could be some breaking up into groups). An exercise I recall working well at Rare Book School involved assessing a particularly unique/strange object in the collection (a fragment, lots of marginalia, strange binding, etc) and making proposals for what a digital edition of that object would look like. EMDA wouldn't have to do that exactly, I think, but some variation on that exercise could provide a practical complement to Andrew Prescott's segment (again, the Hinman Collator visit was great). It would be interesting to see the instructors interact with the physical materials, and I think future participants could learn much from that.

EMDA has reinforced my commitments to my home institution's library system and has reminded me of the benefits of looking outside one's own department. At EMDA, I found support from more advanced colleagues who have more experience in some of the approaches we discussed during the two-and-a-half weeks, as well as from some people who study later periods (namely, the eighteenth century). After talking with one co-participant and one faculty member of EMDA, I also have new plans

to collaborate and extend a research effort I've been running for some time (actually, it's in a bit of a hiatus, but I think I know how to resume it this year).

Twitter and Facebook communities will, I expect, continue to furnish exchange among EMDA members, if in only sporadic ways. I'd also be open to collaborating with participants at conferences, should that arise. All in all, I have a better idea of "who to ask" for particular dimensions of the project I've been planning.

Again, I'd like to see the physical collections play a greater role in EMDA—and this could perhaps join with what Kathleen Lynch and Mike Witmore mentioned in regard to including conservation to some degree as part of the agendas. I also think that, although the participants were a truly remarkable group that I was humbled to belong to, it could benefit from some librarians. That would, I believe, help drive home the point that Andrew and others made about the shared stakes of librarians and scholars underpinning the efforts of 21^{st} -century scholarship.

As for faculty suggestions, perhaps EMDA could consider Alan Galey, who has been working on ways to integrate bibliographical approaches to the changes in media we are witnessing today. I could see this portion fitting either into the early discussions with Lisa Gitelman or the bibliographical portion with Goran Proot and Alan Farmer.

The Folger Institute did a fantastic job in hosting this program. I have no complaints at all about the hospitality, which was excellent, or the space, which was comfortable and included enough power-outlets for everyone. Wireless connection was without any problems for me. The lunches and cocktail hours were delightful and also productive. It was sometimes a tight squeeze at the EMDA table, but there was always room enough. The Catholic University dormitories were fine, in spite of a couple days of cold water and reports of a mouse that I never saw. I suppose my only regret was that it rained on the night of the final banquet, but that falls merely on the weather, and not the Folger!

One participant has already established a Facebook group, and I'm confident that Twitter will be a useful organic ensurer of communication as well. I'm not convinced that the Folger absolutely needs to devote a great deal of ingenuity in facilitating these conversations—organic is the right word, I think, since a lot of these conversations spring up informally at tea time. That said, I hold open the wish for small, periodical "metadata crowdsourcing" activities that might round up some broader interest. It's the incentivizing of this kind of thing that would be the difficulty, though, and I'll surely keep thinking about that.

In addition to the reunion workshop, which I think is a great idea, perhaps the Folger could bring together three-day conferences that would be specially designed for EMDA folks but open to others as well. I like the idea of integrating the 2013 and 2015 EMDA groups as well, at conferences in particular (though the disciplinary division between "Renaissance" and "Eighteenth century" may this difficult). In any case, I think the Folger could benefit from bringing these groups together again, in Washington, on a voluntary basis for the purpose of discussing the latest research in digital approaches to Renaissance studies. Since space at the Folger is an issue when dealing with larger participant numbers, perhaps a hotel in the D.C. area could be the home base for larger discussions. Perhaps these gatherings might feature, in addition to research presentations, kinds of training sessions on the order of Ruth and Sebastian Ahnert's introduction to Python, although in a multi-day and more intensive way, working with Folger materials specifically. These gatherings could serve a double purpose—to improve Folger resources/metadata, and to provide skills and practice to participants.

I'll use this space to say that the faculty were incredibly approachable and exemplified "humanism" in its most generous sense. I've struck up relationships with both faculty and participants,

and ultimately, EMDA left me with lots of "unfinished business" in the best sense of the phrase. My deepest gratitude goes to Jonathan, Owen, Elyse, and all at the Folger and visiting faculty.

This experience exceeded my expectations in a number of ways. I expected the day-to-day schedule to be good; I did not expect it to be exhilarating. My scholarship and digital project work has already been pushed up a notch due to the experiences I had at the Folger. I plan on returning from time to time as a reader. I truly see this as an initiation into the Folger community of scholars.

There was a good balance of engagement in both critical discussion and hands-on activities. It seemed like in the second week we pretty much focused just on hands-on interaction; personally I am more comfortable in this area, so I was okay with it, but I can see that perhaps some who are more comfortable with critical discussion may have found it less than optimal.

Jonathan and Owen were a great team, working with each other to make the little behind-the-scenes decisions that really pulled it together. All of the visiting faculty members were superb. I know there was a bit to dissension about a couple of presentations, especially on gender issues, but I think this was a chance for presenters to show and talk about their work, not necessarily a forum to evaluate their work. So I appreciated the diversity of presenters and subjects. The discussions were generally great, and in talking with a couple of the quieter participants, all felt comfortable discussing and offering questions and feedback during the sessions. It's a great testimony to the director to make this happen.

I generally felt that the range of topics was appropriate for the scope of the program. I thought the OCR ran on a bit too long—it's good to know it but in general we could have spent a little more time on some of the tools of the second week. I especially found the tools of the second week to be excellent preparation for what's ahead, though I still find myself trying to remember all of them and what specific questions I might use them to answer.

Since I've returned home I've actually used a lot of the tools that were introduced in the program. Much of it is workflow—figuring out what tools to use and how to use them to get from point A to B. I think the Folger more than adequately provided these. I have a greater understanding of OCR and its issues, and a good rack of tools to use when I get past that stage. I have to say I had heard of network analysis but did not understand what one could really do with it until hearing Ruth and Sebastian Ahnert's sessions.

I have not been in contact with the other participants but plan to do so soon. Much of the value of the institute is getting to know the other participants, their passions, and their expertise. I know I will be contacting some of them over the next few months as my own research interests become more clarified for me.

This question about future Folger initiatives takes a bit of thought. Off the cuff though, I think the Folger was right on with EMDA2015—the scope and presentation of the institute was incredibly valuable. I have to say that the members of the staff of the Folger are competent and very good at what they do, but perhaps not as approachable as I would hope they would be. I can't help but think that if you are really good in a specific area that the Folger is doing now, you may have a shot at working with it in some capacity. Otherwise, maybe not. Owen is the exception, of course, but generally there are things that the staff can learn from the participants as well, especially in terms of broadening the scope of the Folger.

Wow, everything at the Folger was outstanding. The meeting space was comfortable, the hospitality definitely top-notch, the library world-class. I felt welcome there. The housing arrangements left a bit to be desired, but honestly for the price during summer in DC it was hard to beat. I appreciate all

the effort and time that Elyse put into making the arrangements and working with them when things went wrong.

Most of what we need now is to take off on our projects and, when needed, to touch base with program faculty and the Folger when we have questions or need suggestions. I truly feel my expertise in this area has risen, and the Folger and program faculty have contributed greatly to it. I was blown away by the expertise of program faculty who visited us every session. Truly astounding.

I think the reunion workshop is an important feature; I'm really looking forward to next year when we can meet again and show what we have done. Social media is a good way to ensure that the afterlife of EMDA is glowing, but not everyone uses it as adeptly and passionately as others. The academic rank of the participants was all over the board—some of the answer to this question is really about what the participants need. Some have just finished their doctoral programs and need a job. Others are junior faculty and need letters to support their research or tenure. The flexibility of the Folger and its staff in facilitating these kinds of interactions will be important over the next few years, and will also provide a good future for the Folger as well.

The program clearly was one of the highlights of my academic career thus far. Thank you, one and all!

I had high expectations of EMDA 2015, and I am happy to say that these were definitely met. The experience has been extremely rewarding. It has enabled me to acquire new knowledge and skills that will be invaluable to my career. Being able to share experiences and concerns with the cohort of specialists EMDA brought together was one of the most valuable aspects of EMDA. I returned home with a much better idea of how to develop my project, but also with the awareness that I can now rely on the group to discuss my project further and share ideas and information. My improved awareness of the digital tools and methodologies discussed during EMDA has already had a tremendous impact on my project and has improved my chances of obtaining funding for its future development.

I think this approach was very useful. I found the hands-on aspect of the Institute particularly helpful, as it has enabled me to acquire new skills more effectively. Possibly, I would suggest an even stronger emphasis on practical activities and on teaching participants how to best use new DH tools.

The director did an excellent job at guiding us through EMDA. The faculty members were, with no exception, competent and enthusiastic about this venture. Their willingness to help us on a one-to-one basis and remain in touch after EMDA is truly encouraging. I thought that the progression of topics was very effective. The over-all organization was excellent, and the inclusion of evening social activities was indeed a great way to help us socialize with one another. A minor suggestion: perhaps, the various lists of suggested readings could have been slightly better coordinated—some days required reading several books, which is something I would suspect none of us had the time to do in advance. Maybe, while a larger reading list is no doubt helpful for exploring things further, identifying within it a more limited set of readings key to class discussions might be a more useful approach (which, I should say, was done by some faculty, and was indeed very useful).

All sessions were very relevant to Early Modern studies, and they all gave me ideas applicable to my project, to future projects, or to my teaching. The sessions on the TCP and related projects and the one on metadata were particularly helpful. Perhaps, more emphasis could have been placed on the use of visualization tools. While the session on visualization was very good, it ended up placing more emphasis on theoretical aspects—this was interesting, but I would have liked, in addition, to see more time dedicated to teaching us how to use visualization tools for our own projects.

While DH tools relating to both printed texts and manuscripts were covered extensively (and this is definitely a strength of the Institute, and was very useful for my project), it might be possible to also have a session relating to issues and tools specific to dealing with illustrations.

I see the strong possibility of future collaborations with some of the other participants. The Folger commitment to getting us to meet their readers was also very helpful, as it enabled the fostering of new networks.

The second EMDA was definitely a success, but if a future EMDA has to represent a "step forward" in terms of contents, I think that a possible option could be having a slightly different format. It would be difficult to imagine an EMDA with more "advanced topics" than the one we just had. The Institute could perhaps have a more practical aim, such as gathering a group of people to tackle a specific DH issue or create a new tool or resource, or a set of guidelines of DH practice, or put in place the foundations for generating such a resource. Three weeks is not a lot of time to create something of this kind, but fifteen focused and skilled people could achieve something tangible. For instance, EMDA could generate an online portal for the Early Modern DH scholar, creating a guide and gathering links to all relevant sources and tools in one place, and also generating original articles aimed at promoting good practice in the field. Or it could represent the opportunity to troubleshoot one or more specific concerns present among scholars in our field (such as the issue of curating the TCP metadata that was raised during our last session).

The meeting space and hospitality were excellent, and the whole Folger team did all they could to ensure we had all we needed and were comfortable. This greatly contributed to making EMDA an extremely enjoyable as well as constructive experience. The housing arrangements required accepting some compromises, but these were acceptable, and preferable to paying a higher rate per night.

Both the Folger staff and faculty are already contributing to fostering communication by emailing the group, which I think is very beneficial. Keeping one another updated on DH news is possibly the best way to maintain a sense of community. I look forward to hearing more in detail what the reunion will entail. Giving us a manageable goal to work towards—as soon as possible—would be a good way to keep us focused. If the next EMDA was to have a more specific and practical aim, maybe part of the reunion, or the months leading to it, could represent a good opportunity to discuss what that aim might be.

It would be helpful if we could have a common goal even after the reunion. Perhaps, the DH portal for the Early Modern scholar I mentioned above could be something the Folger could propose to create in collaboration with former EMDA participants. If we were all to be involved in generating a common resource, something more organic and more tightly structured than individual Folgerpedia articles, this would be more likely to foster collaborations, and would also create something on the Folger site that could generate wider interest in the broader DH community.

I just wish to thank all the people who made EMDA possible—from the funding body, to the Folger staff, to the director and faculty. It has been a remarkable experience, and one I am sure will prove very valuable for my current and future projects and for my career development.

EMDA was an invaluable experience, and one that will resonate with every aspect of my professional development as an early modern digital scholar. I learned so much about the state of the field (within a highly specialized context, which seems unique for DH training at this moment), the wide range of tools and methods available for research, and the critical stakes of this kind of work. I joined EMDA with a project in the works, but left with a much more focused sense of how to proceed and what the end goals of the project should be. In addition to the resources provided by the Folger and the structure of the

program Owen and Jonathan put together (visiting scholars, readings, etc.), I learned so much from my fellow participants. The resources I now have available through this network of contacts are truly the part of EMDA that I appreciate most.

Our sessions were often a nice balance of critical discussion and hands-on practice. I especially appreciated when we had a chance to experiment with the tools and then follow-up with a brief period of questions and discussion at the end of the session. It's hard to gain a critical perspective on a particular tool without hands-on interaction, so the discussions after experimenting always seemed very lively. That said, I would have liked to see more critical discussion at times—especially in relation to our reading preparation. We were asked to do a fair amount of reading before almost every session, but never really had a chance in our discussions to engage with it (perhaps with the exception of Lisa Gitelman's session). Rather, the presenters often provided a hefty recap of the readings, to the point where the presentation/reading pairings seemed repetitive.

First, I especially appreciated the structure of the schedule—a week focused intensely on "raw data" and the metadata behind our practices, followed by a week on visualization and the more argument-focused methodologies of the field. The first week provided a solid foundation for the second and helped me gain a more thorough critical perspective with which to approach the second week's work. Second, the Folger-related presentations at the end of the first week were especially exciting. Drawing connections between the Folger space, archive, and DH institute was such a compelling way to think about current projects in data organization and management. In fact, I would have liked to keep the Folger and its archive at the foreground of our discussions more often. Third, having a software consultant on hand, especially someone like Eric who's using early modern contexts for his computer programming work, was invaluable. Finally, I especially enjoyed our work on visualization with Stephan Theil and Mike Gleicher. Because DH is moving rapidly towards more complicated visualization methods, it was very useful to have several solid sessions on the basics of visualization from the two different perspectives Stephan and Mike brought to the table.

The scope of our readings and discussions seemed very appropriate to current turns in DH tools and methods. And because some of the tools/methods discussed are still fairly new to the field of early modern digital particularly, the choices were well suited to the innovative goals of EMDA. I especially enjoyed learning more about Docuscope and getting an in-depth look at the system behind this tool from Mike Witmore and Jonathan, who are both working so closely with it. I also enjoyed the time spent on network analysis with Ruth and Sebastian Ahnert. Network analysis methods especially seemed very new to many of us around the table, and I would love to see EMDA doing more of this introductory work taking on new methods and tools that the field is only beginning to incorporate. The problem with a tool like network analysis, though, is that it relies so heavily on coding (Python in this case) and there were certainly several participants who were using Python for the first time in our sessions on network analysis. Consequently, as fascinating as the methods were to learn about, and as accomplished as we all felt getting the methods to work properly, network analysis (as an example case) was very difficult to truly critique, question, and delve further into (without starting from scratch to learn Python on one's own time during the three-week institute). I'm not sure how to address something like this imbalance in future programs, but I do think our discussion on methods like network analysis could have been a bit more lively if there had been a better balance in the room in terms of coding knowledge. But I also think that coding knowledge shouldn't be a prerequisite for DH work, so have no real suggestion on how to implement changes moving forward.

The resources provided by the Folger during the program were appropriate and effective for the work of the institute. It seems a simple thing, but even just the strength of the internet speed was a crucial part of our daily work and the Folger clearly made every effort to ensure even such small details were accounted for. The software support during the institute weeks was also crucial, and a very helpful resource. I would have liked, perhaps, a day at the very start of the institute dedicated solely to software

preparation. Rather than have half an hour at the end of each week to get the software up and running for the next week, I could see an entire afternoon at the very start of the institute (perhaps during the orientation day) dedicated to installing and debugging every software package needed for the three weeks.

Certainly I will continue to communicate and work with some of the other EMDA participants on future projects, talks, conference panels, etc. Those partnerships are by far the most valuable take-away from this institute. Especially as a graduate student about to go on the job market, having faculty members at institutions around the country that I can reconnect with at conferences and professional events is such a benefit to my future in this field. Additionally, EMDA allowed me to gain a more solid connection to the Folger Institute, its staff, and the library's archives. Even with the small amount of time available to visit the reading room and engage with the Folger's resources, I have a better sense of what to look at when I return.

I would love to see a digital agendas institute that pushed the envelope a bit more in terms of its focus. As fascinating as our sessions were and as crucial as big data is to the DH field at this moment, the topics under discussion (especially during the visualization week—corpus linguistics, PCA, cluster analysis, etc.) have become fairly standard for the field. The evidence for this was apparent in the fact that many of the participants often had experience with whatever tool was under discussion on any given day (with the exception maybe of network analysis). But there are a lot of interesting projects and discussions on the margins of big data that seem more innovative for literary studies. In our discussions, in fact, we broached the idea of incorporating more out of field methodologies into our digital practices. It would be great to see an institute that experimented with the critical discussions and methodologies of a field like new media studies, for instance, or ethnography. These fields have such different digital methods than literary studies and even the humanities more broadly. If the goal of future digital agendas is to increase the innovation of this field, perhaps it could turn away from what have become fairly standard literary-based DH practices and towards more provocative interdisciplinary methods.

The Folger is the perfect place for this institute. The meeting spaces were great, and I think our work greatly benefited from being at a place with such a wealth of early modern resources and scholarly networks. And, considering how much we were overloading the technology at various points, the Folger handled it very well. The housing arrangement was, for the most part, fine. It was nice to be housed with the EMDA group; it truly added to the overall sense of community among the participants. However, the kitchen situation was really a problem—more Catholic University's setup than anything the Folger could control. Considering that the participants are in DC for such an extended stay, I think it's crucial to provide a place with both a functional kitchen (i.e., not one that an entire building is sharing) and supplies. The stipend is generous, but could stretch much further with the ability to comfortably cook dinners in the housing space.

I think the reunion weekend is key in future collaborations, and I'm very glad that it's been folded into the structure of the program. Knowing that we will be checking in with everyone within a year of the program is a sure way to keep us connected and working hard. In terms of future institutes, I think digital agendas would highly benefit from having some kind of "alumni" coordinator—a participant who attends each digital agendas session and is able to facilitate communication between participants across sessions (perhaps there's someone from EMDA13 whose work lines up very neatly with someone from our group, etc.). Additionally, the coordinator could be the primary point person for future contact and collaboration. Anytime there's a key conference approaching, the coordinator reaches out about organizing a panel; anytime the visiting scholars are giving talks or visiting an area where EMDA participants cluster, an email goes out to arrange a meet-up. My concern is that contact among the participants will fall by the wayside simply because there's not a point person to facilitate constant contact and check-ins.

To reiterate, I think the best afterlife of this program is continued connection and collaboration among its participants. Ensuring that EMDA alumni always have a forum for new ideas, conversations,

and collaborative work seems one of the most beneficial elements of the program. It would be especially useful to find a way to incorporate both previous EMDA groups into a project or reunion meeting, to keep facilitating connections among different generations of early modern digital scholars. I also think that EMDA participants could do a lot to help the Folger with their digital agendas. Given the generosity of the Folger in hosting and organizing these programs, it would be such a wonderful way for the participants to give back while also extending the life of Folger digital programs. Whether this manifested in the form of Folgerpedia articles (which we did talk a lot about during our sessions), assistance with metadata organization, digital exhibition elements for upcoming Folger exhibits—participants could continue working with the Folger in any number of ways that would benefit, I think, both parties.

I would like to close with just a big thank you to everyone who was involved in making EMDA possible. It was truly an incredible experience and one with benefits that resonate widely in the early modern digital field.

EMDA 2015 was one of the best academic experiences I have had. At an uncertain moment in my career (between earning my Ph.D. and securing a long-term academic appointment), it gave me the opportunity to learn about a set of tools and strategies that I will use on a variety of projects over the course of my career, and, more importantly, to connect with a generous community of scholars who keep me feeling optimistic about the field. I have come away with ideas for further developing the project I was working on before the institute, developing a greater competence about the creation and maintenance of digital scholarship. I was also inspired to embark on a new project on genre metadata for the TCP corpus that would not otherwise have emerged for me.

I enjoyed the balance between discussion and hands-on experience. I found it productive to spend time with a new set of tools in a room full of scholars with varying degrees of experience with them. I also appreciated that we were able to set aside some of the preliminary questions associated with DH work in order to appreciate these methods in their own right.

I really enjoyed that many of the visiting faculty members were able to stay for several days of the program, giving us a chance to get to know them and to continue the conversations that they started with their presentations.

It would be interesting to see how EMOP develops in the coming years, especially since it will likely take over where the TCP leaves off.

Within a week of EMDA, I had already begun collaborating with the VEP team on the genre metadata project, and I'm optimistic that we will have a stronger sense of how effective quantitative methods are for inquiring into and assigning genre categories in the broadest sense.

I would be interested in exploring the pedagogical dimensions of quantitative analysis. I have to admit that if there is anything I'm most skeptical about when it comes to quantitative analysis, it's the usefulness of its application to the undergraduate classroom. I've seen this done poorly in the past, and I'd love to hear more about the opportunities and limitations of DH methods for pedagogical application.

Everyone at the Folger was incredibly accommodating. Apart from the hot water problems at Catholic University (which were beyond the institute's control), I felt quite at home.

I'm excited for our one-year reunion and the chance to meet with the EMDA2013 participants. I hope that we'll have formal and informal reunions in the coming years to see how our projects develop.

Without a doubt, I learned several very valuable tools while attending "Early Modern Digital Agendas: Advanced Topics." I certainly anticipate that I will be more able to conceive of and to accomplish different types of academic projects through the use of the methods that I learned over the course of the institute. I also feel that I will be more able to help those of my students who have an interest in the types of digital methods that we explored at the Folger. At the same time, I feel that the breadth of topics were disciplinarily far too narrow and that the program was at a loss for not exploring a range of potentially more creative questions, resources, and methods.

This aspect of the workshop seemed fine, and, specifically in regard to the "hands-on" interactions with digital tools, there is probably no better way. That is, the hands-on moments usually spiraled into some form of chaos, with all the participants at varied levels of being able to accomplish the tasks at hand, while the very capable technical support crew (with special thanks to Eric Alexander) obviously had difficulty keeping up with the problems that the participants were having. I personally found it easier to solve technical problems by writing to friends back home for help or scrolling through online discussion forums. The critical discussions were less effective on account of questions to the group being vague and poorly formulated or artificially limited.

I think that the most effective teachers at EMDA2015 were Laura Mandell, Ruth Ahnert, and Sebastian Ahnert. The most interesting speakers, to me, were: Jan Rybicki, Mike Gleicher, and Stephan Theil.

I admit, and I am sorry to say, that I did find the scope of the program frustratingly narrow. The topics, tools, and questions were directly related to literary questions, assumed reliance on primary sources that originally appeared in print, and engaged almost solely with the specialized questions of literary scholars. Of course that would be no problem if the program were only for literary scholars, but it is certainly a shame for any undertaking that seeks dynamically and creatively to address the broader richness of early modern studies.

My current work tends to use a lot of spatial information and representations in conjunction with quantified economic and social/demographic data. I am working on developing new arguments and new associations that come from layering political, legal, social, and economic trends in the geographic spaces in which they were experienced/created in the early modern period. Toward that end, I am very interested in spatial tools (such as GIS) and statistical tools (including R and SPSS). I am also continually searching for ways to visually communicate these complicated layers of changing relations in space. My primary resources are also almost never printed. Unfortunately for me (but also maybe me alone) we did not have the opportunity to talk about such methods, tools, or questions. As the EMDA program continues to grow and to engage with more people, it may be worthwhile to explore more interdisciplinary opportunities.

I hope to be able to ask fellow participants for help using the tools that we worked with at EMDA2015 if they become more relevant to my work in the future. I am also very much looking forward to working with any of the wonderful people at the institute.

I would recommend for future digital agendas a wider variety of digital tools aimed at a greater spectrum of questions using a broader foundation of primary resources and databanks. I think that the intellectual richness and creativity of the program could be made deeper and more dynamic if participants and teachers would be invited from such fields as demography, economics, history, legal studies, philosophy, mathematics, sociology, criminology, psychology, art history, cartography, material culture, museum studies, etc.

The Folger Institute is an unsurpassable host. Their facilities are gorgeous, their hospitality is incredibly generous, and they have all of the finest academic resources. Owen Williams and Elyse Martin were particularly kind and always helpful and attentive throughout the program.

I think that the Folger has done an excellent job in creating a forum for future scholarly communication.

I would think that, if possible, the EMDA should not pass into an afterlife, but rather continue to grow and experiment with new possibilities of how to relate and enrich various academic pursuits concerned with the early modern period.

I just hope to clarify that I thought that EMDA2015 brought together a really wonderful group of people who I found excellent to talk with and to learn from. Although I do not think that the program reached its potential in regard to exploring either digital methods or a range of early modern topics, what it did engage with, it did so in a way that could probably not have been done better. And so, I am very grateful for what I learned and the people that I met.

EMDA2015 provided a rigorous intellectual environment that allowed for unparalleled immersion into the topics covered. The program also provided a wonderful sense of community. From the caliber of faculty to the fantastic staff to the extraordinary cohort that was recruited, I was deeply impressed with every aspect of the program. I anticipate utilizing many of the tools and theoretical approaches to which I was introduced; as a result of interactions I had with faculty and participants during the seminar and outside of it, questions regarding my research have already taken a clearer form. Perhaps the most obvious measurable result of my engagement with the seminar is my dissertation prospectus, which I rewrote completely upon returning from EMDA2015. Conversations I had with faculty and students at EMDA2015 gave me confidence in the value of my research questions and preexisting work and reminded me that there is a vibrant, and incredibly smart, community of early modern scholars who take digital matters seriously. In short, I am confident that my future work would have taken a completely different—and less intellectually engaging—direction had I not been afforded this opportunity.

I appreciate that our schedule provided a well-balanced mix of praxis and discussion from beginning to end. I also appreciate that critical discussion did not dominate too much of our time, as has been my experience in other seminars; we were, after all, encouraged to engage in valuable reflective conversation outside the seminar, during lunch and through other social opportunities. That said, I wish we had spent some time discussing issues that came up during the seminar, particularly around gender and DH.

Virtually every aspect of the program was "noteworthy" in a positive sense.

First, the program itself was beautifully designed; topics, tools, and readings complemented each other perfectly, and the schedule as a whole progressed organically.

Second, Professor Jonathan Hope was a truly inspiring leader. Even after combing through the schedule each morning, I was delighted to find myself surprised each day with the activities he had planned; our experience of working in teams with clay models was particularly memorable. Given the spontaneous nature and intensity of the environment, I felt at times like we were in a reality TV show! (I was not alone in feeling this way).

Third, the staff—particularly Owen and Elyse—were wonderful, professional, and extremely helpful in every way, from anticipating problems to organizing activities that brought our group together. Eric, our computer science expert, was also invaluable—he saved the situation for multiple people each

day, and he did so with utmost cool. Fourth, the faculty were uniformly impressive, and they seemed genuinely happy to be with us and at the Folger. I was particularly inspired by Professor Laura Mandell's work and her engagement with the seminar and the seminar participants following her workshops, as well as the Docuscope presentations by Professor Hope and Dr. Michael Witmore.

Finally, I was wowed by the quality of work and thought coming from seminar participants; as Professor Hope mentioned, I know it was not easy to make decisions regarding who should attend. In all, I am honored to have been a member of such a thoughtful, respectful, professional, and highly engaged group of scholars.

Initially, the scope of the seminar seemed overwhelming; I wasn't sure how we'd be able to engage our data hands-on given the sheer amount of material to be covered. I recall scrambling at times to re-sort my data (or invent new data altogether) to fit the needs of the program/approach in question. To avoid this, perhaps in the future each unit might specify the nature and size of data that would be most useful. As for usefulness, the units on stylometry and Docuscope stood out for me. Docuscope in particular opened my eyes to possibilities for DH I had not yet explored, and which I intend to integrate in my future work.

I make use of principle component analysis and dendrograms to determine stylistic patterns across corpora. I also engage network analysis and hope to do so more rigorously in the future. EMDA2015 more than adequately provided assistance with these technologies; I was introduced to programs and approaches (such as Docuscope) I had not previously engaged, and I received world-class advice on tools and methodologies with which I was familiar prior to EMDA2015.

I envision partnering with at least one participant in an upcoming conference, where I was asked to present on my work. Generally, I envision staying in touch with members of our cohort and faculty, some of whom have already offered suggestions for my dissertation project; I'm also open to and excited about potential collaborations. Finally, I'm committed to solidifying my relationship with the Folger Institute and Library by engaging in upcoming programs and contributing, at some point in the near future, to Folgerpedia.

I would like to see a keynote address or opening/closing talk of some kind to bring the various topics together, or to provide a "state of the field" from an expert. While we are all "advanced" DH practitioners, it isn't immediately obvious (for example) that metadata should matter so greatly, or how this question bears (if it does at all) on topics like data visualization. I wonder if Lisa Gitelman, for example, might have given a talk or lecture on "the state of data" for our group. I also hope future EMDA seminars will allocate time to address DH/academy politics, particularly given issues that arose during the seminar. Finally, I think everyone would benefit from engagement with folks on the media studies side of DH; I envision, for example, a highly productive afternoon with scholars like Lev Manovich, Janet Murray, Ian Bogost, and/or Alexander Galloway.

The Folger was a fantastic host. Our meeting space was lovely if a bit tight at times, given the number of machines and materials occupying table space on a given day. As I've noted elsewhere, Owen and Elyse were perfect hosts—prompt, friendly, and professional. The library is the best of its kind anywhere; the only challenge, of course, was finding time to use it! As for computing and technical matters, there were moments when wifi seriously lagged; as I recall, this is likely because multiple participants were downloading large files. This actually did cause problems for folks who were unable to access software or data which we needed to use immediately. Post-seminar events organized by Folger staff were great fun and conveniently located. In all, the Folger and Folger staff did a wonderful job in hosting a near-seamless EMDA experience.

Between the EMDA listserv and Facebook page, the Folger has worked out two great ways for participants to engage with each other. I also like the idea of scheduling unofficial "meet ups" at events like SAA, RSA, ACLA, MLA, the larger regional MLAs, and so on.

I wonder if EMDA participants and faculty might propose ongoing panels and roundtables at events such as MLA, under the "EMDA" aegis? (For example, "EMDA @ MLA 16: Topic X"). Might we also collaboratively publish articles or special issues based on the work we do (again, under the aegis of EMDA)? In short, I wonder how EMDA might brand itself through conferences and print in ways that advance and concretize the intellectual experiences of seminar participants.

Thank you so much for this incredible experience!

Overall, the experience was a profoundly valuable one upon which I will draw upon for years to come. Simply put, reflection upon EMDA 2015 and its conversations has transformed my project, as well as my understanding of the work involved. The concentration of technical ability, scholarly perspective, and energy among participants and faculty continues to inspire and motivate.

Insights from EMDA 2015 have already begun to exercise significant effects upon my work. Since the institute's conclusion, the truly cutting edge nature of our discussions has become yet more clear, as further summer courses I have attended were enriched by EMDA 2015 insights. Such discussions helped shape the intellectual trajectory of these environments in areas ranging from metadata curation to digital pedagogy. Here and consistently, the Folger continues to lead, and I am grateful to have been part of the experience.

EMDA 2015 was both deep and rich. I have only begun to scratch the surface of its applicability, even within areas of whose direct relevance I was previously aware. With that said, its lessons have already made possible the conversion and linking of datasets integral to my project, and EMDA-discussed approaches to selecting, visualizing, and iteratively articulating connections will almost certainly follow.

One further pedagogical connection deserves mention. Since the institute, I have discussed with faculty at my home institution terms by which we may advance undergraduate research opportunities through my project. I am delighted by the development and even more thankful to EMDA 2015 as a result.

The level of expertise convened both within the group and on its behalf led to extremely strong critical discussion, especially in the institute's later stages. Informal conversations, particularly among those staying in the residence hall, continued and enriched the in-class sessions. As it emerged, the group's sense of shared perspective was compelling.

Both discussions and lecture-type sessions were valuable, and I believe the group as a whole came to appreciate initial topics even more greatly as time progressed. One powerful moment came late in the second week, during discussion of Visualizing English Print (VEP) as a case study. This opportunity to explore and provide feedback upon ongoing, large-scale research allowed all to register ways in which differing disciplinary perspectives might converge within a single project. Discussion of challenges VEP has encountered and addressed, especially in working with EEBO-TCP texts, also helped calibrate expectations for ways participants' emerging ideas might be realized when working with related corpora. (Blog posts since the institute itself have continued this extraordinarily helpful anatomization.)

Also of note was Professor Jonathan Hope's prescient choice to have participants model computational data physically at the outset of Week 2. Not only did this activity serve as an excellent transition, but the teamwork required also strengthened participants' sense of common purpose. (Its connection with the session's reading was likewise tangible.) This context also supported participants' ethos of collaboration.

In an environment of such range and depth, the only point I might raise would be that the richness of resources, and immense knowledge of all convened, was such that slightly greater time for discussion during some sessions may have been helpful. Going forward, one possibility might be to field questions before moving into the more structured format so useful for both understanding and ongoing reference.

For instance, within Day 7's survey of corpus analysis, our three speakers and two major tools provided astonishingly useful perspective, as well as resources to which to return. Given my own desire to engage the topic further, I would have been glad to discuss nuances of the discipline and our initial results more extensively. Yet limits are inevitable, and the breadth of exposure achieved has already proven its value.

Participants' projects benefited greatly from the scope and diversity of perspectives engaged, as well as the opportunity to incorporate relevant insights. By EMDA 2015's close, many projects emerged transformed, with some (such as the Word2Vec collaboration, Whitney Sperrazza's work with stage directions, and Dr. Jacob Tootalian's project to enrich EEBO-TCP metadata) taking shape during the institute itself.

The institute's Director was exceptional, and his coordination provided a phenomenal experience on all fronts. Not only is Dr. Jonathan Hope adept at cultivating scholarly and interpersonal community, but his expertise in corpus linguistics continually connects with and enriches the research interests of all participants. During EMDA 2015, his daily framing of topics drew upon multiple perspectives while providing continuity, and his genuine engagement with the insights of both participants and faculty proved a model for ongoing conversation. One could not envision a leader more appropriate.

Crucially alongside Dr. Hope's work was that of EMDA 2015 Project Director and Folger Assistant Director for Scholarly Programs Dr. Owen Williams. His long and rich history with the Folger Institute remains vital to its programs' success, and his eye for detail in contexts both intellectual and interpersonal is unmatched. Within EMDA 2015 itself, his connection of topics at hand to both book history and the seventeenth century reinforced the centrality of these areas to participants' work, while also providing links to Folger scholarship in further contexts. Together, he and Professor Hope ensured an incredible institute.

EMDA 2015 faculty were similarly stellar, and the breadth and depth of topics covered remain nothing short of astonishing. Special thanks are due to Drs. Ruth and Sebastian Ahnert, Professor Laura Mandell, Dr. Paul Schaffner, and Professor Andrew Prescott, all of whom engaged EMDA 2015 participants at length by remaining with the group for days beyond their own presentations. As a rising scholar, being part of this evolving discussion among the field's experts will shape my perspective for years to come.

Individually, each presentation offered vital perspective, and the cumulative frame of reference created by considering earlier presentations in light of later ones has underscored the logic of the whole.

Even the shortest of presentations has exercised substantial impact. Trevor Muñoz and Dr. Erika Farr's session on metadata, for instance, has proven formative. Since EMDA 2015, I have also taken a further week-long course with Trevor Muñoz, given my understanding of the initial discussion's importance. (Please see my further responses for my sense of its ongoing impact.)

Likewise brief yet invaluable was the perspective of Professor Tony McEnery on corpus linguistics, as well as his focus upon intersecting resources. The context thus articulated was one of the clearest I have encountered on the topic, and its centrality to questions addressed by the institute apparent. Not only were his insights vital to understanding the EEBO-TCP corpus, but they have also illuminated possible rationales for building complementary corpora of our own. In this regard, tools demonstrated by Professor Laura Mandell will likewise prove crucial, and I am eager to undertake such work. (Analytic tools demonstrated by Professor David Hoover and Professor Jan Rybicki will also be extremely helpful.)

Here, appreciation should be expressed to Dr. Anupam Basu, who—while technically an EMDA 2015 participant—provided unique perspective among the institute's top-notch attendees. His unfailing generosity in giving feedback on work in progress deserves mention. I would enjoy hearing him present further aspects of his own scholarship, as well as lead a seminar of his own, should he be inclined to do so.

As a whole, the group convened by EMDA 2015 was also nothing short of incredible. Required facility in computational methods resulted in a slightly younger cohort than one might imagine, and this factor made participants' proficiency and accomplishments all the more astonishing. The degree to which projects spoke to one another was inspiring, as has been reflection upon the institute's well-chosen topics.

The final week's presentations testified to the power of ideas inflected by the institute itself, and I appreciated the many times further members of the Folger, including Folger Director Michael Witmore and Executive Director of the Folger Institute Kathleen Lynch, were able to attend. Together, these projects recapitulated and extended key questions in compelling research contexts, and I look forward very much to following the work of participants in years to come.

Central to my response is that reflection upon EMDA 2015 has clarified the full institute's relevance to my project, in ways becoming ever more apparent. Revisiting each of the sessions has helped illuminate approaches to key challenges in ways I could not have otherwise envisioned. (Given the length of thoughts thereby generated, please note that sessions specific to the Folger are discussed later in detail.)

As EMDA 2015's materials note, the recent release of EEBO-TCP Phase I transcriptions affords seminal new perspective on textual environments of the early modern period. I could not have been more grateful for insights into this corpus' creation, development, and maintenance from Dr. Paul Schaffner and Rebecca Welzenbach, two individuals crucial to this work. Their invaluable perspective is one I seek to honor in my project and via writing in other forums, such as Folgerpedia. (One envisions a list of EEBO-TCP "talking points" for any who are considering or have undertaken work with this corpus.)

Related to this topic, and intersecting with it, was the issue of metadata, early modern and otherwise. Our relatively brief exploration of this topic exercised wide-ranging effects, as I registered that my project's success would depend on its facility in this area. Inspired by our session with Trevor Muñoz and Dr. Erika Farr, as well as by further, Folger-led discussions, I have since taken a week-long course on the topic. Discussions with EMDA13 researchers have affirmed this aspect's importance, and I would be grateful for further seminars and offerings along these lines. (On possibilities one might envision, please see below.)

Perhaps given the nature of my project, I found the time devoted to corpus approaches immensely useful, as well as fascinating. Deep, qualitative exploration of the Visualizing English Print project also helped the group develop perspective in key areas—not only via the project's sophisticated data modeling, but also given its granular attention to means of preparing data. (Here, Professor Michael Gleicher, Eric Alexander, Folger Director Dr. Michael Witmore, and Professor Jonathan Hope gave explanations that were among the clearest and most cogent of any I have heard on these topics. The project is a model for future work.)

As noted above, nuanced understanding of corpus-based, statistical methods will be vital to placing qualitative insights in quantitative context (and vice versa). Going forward, the opportunity to engage corpus linguistics theory and methods at length would be extremely valuable. Given the degree to which participants' interests converged during discussion of this topic, it seems ripe for further consideration. Also not to be overlooked are rationales for developing one's own corpora—a potential area of immense interest, as mechanisms for doing so become increasingly sophisticated. Here, I am extremely grateful for the work of Professor Laura Mandell and the eMOP project and look forward to following its progress.

Were the Folger to develop related institutes or seminars, I would suggest further attention be given to statistical methods—specifically, how different models and algorithms gauge similarity and difference, as well as how and what they measure. (Several further tools within the stylo package, such as oppose, rolling.delta, and rolling.classify, could perhaps illustrate these concepts.) In any case, I would love to delve more deeply using corpora of my own creation. Here, Professor Hugh Craig's Intelligent Archive has been intriguing, and I look forward to exploring related materials posted by EMDA 2015's Dr. Mel Evans.

Amid the wealth of perspectives convened, the session on analytical use of bibliographic metadata could not have been more pertinent for placing into context the stakes of our endeavors. (Here, I am influenced by my own interests, yet I nonetheless support the point.) Together, the perspectives of Professor Alan B. Farmer and Dr. Goran Proot served as complementary exemplars. Their shared emphasis on the accuracy of data, as well as the surprisingly print-based means by which one may reliably compile it, provided—in a phrase that continues to resonate—a means of navigating "between the heuristic and the hubristic," as well as important affirmation of the need for human perspective. As my appreciation for differing statistical methods grows, I will both benefit from and enjoy revisiting their work.

By concluding with questions some might view as convening the group, Professor Ted Underwood and Professor Andrew Prescott provided hugely valuable perspective, as well as a point of departure for future inquiries and symposia. In a sense, EMDA 2015 ended—greatly renewed—where it began, with concerns of media change and the appropriateness of analogies placing media transformations into context. Discussions during this session were spirited, and both faculty members' feedback greatly appreciated.

All sessions were immensely valuable, and to anatomize them would require many further pages. Yet one further session—that of Drs. Ruth and Sebastian Ahnert—helped me see anew areas with which I believed myself familiar, providing inspiration and renewed focus. Not only did I learn immense amounts from their workshop on network analysis with iPython notebooks, but their initial presentation also deftly illustrated the value of invoking large-scale contexts in ways consonant with more conventional humanities scholarship. This dual model is one I seek to emulate in my own work, and I am profoundly thankful.

Ultimately, reflection has confirmed the centrality of EMDA 2015's opening concepts, in ways apparent at the time, yet increasingly clear in retrospect. Registering implications of the term "data" in a humanities context is not readily done, even among those already comfortable with computational methods. Returning to the media archaeological approach of Professor Lisa Gitelman has affirmed the need to appreciate vocabulary as methodology. Learning how one may be misheard, even among those eager to learn, is vital, and scholarship in this new key may well demand translation in forms we continue to gauge.

Chief among the requirements for digital work are always power and Internet access, and the Folger ensured ready access to both during the whole of the institute. Any problems were due to my own

machine—all aspects provided by the Folger were more than adequate. (Thank you also for the large, centrally placed power strips!)

I also appreciated the advance notice provided by both the Folger and its faculty regarding specific software needed to engage in the sessions. Given the high level of work involved, the varied programs needed, and the distractions that can arise as participants prepare to attend, perhaps one or two brief evening sessions dedicated to installations would also be helpful. Such sessions would be optional, yet their presence might help ward off issues in advance, particularly as required software may evolve.

With that said, the Folger absolutely encouraged and supported advance installation, with resources and links provided to do so. At the end of Week 1, this "evening sessions" model was also followed informally, which was extremely helpful. I would encourage such an approach for future institutes, as well.

Also, given the unpredictability of digital work, perhaps further institutes might maintain one backup computer, to support continued engagement in the event of an unanticipated crash. With that said, technical support was always available, and all issues were addressed both swiftly and well.

Emerging in EMDA 2015 discussions was the idea of shared curation—termed at one point "conscientious co-curation"—of EEBO-TCP metadata. Given the vital role EEBO-TCP texts are likely to play in early modern scholarship over the next several decades, I would view such collaboration as a key contribution that EMDA could make, both via its 2015 participants and more broadly, with the Folger's coordination.

I am looking forward to collaborating and sharing scholarly perspective with many institute participants, given our intersecting interests. With EMDA 2015 participant Dr. Michael Gavin, I have discussed the possibility of work involving ESTC metadata, and I am grateful for the extensive support already provided by Folger staff (such as Head of Collection Information Services Dr. Erin Blake, Senior English Rare Book Cataloger Deborah J. Leslie, Metadata Specialist Emily Wahl, Research and Outreach Specialist Abbie Weinberg, and Cataloger Sarah Hovde) to this end. Presentations on Word2Vec undertaken by Dr. Gavin, Dr. Collin Jennings, and Dr. Brad Pasanek have also strengthened the possibility of an early modern contribution invoking more contemporary theories—specifically the work of William Empson, given its mathematical basis. Further connections have been made with all participants, with specific possibilities discussed with Dr. Hillary Nunn, Whitney Sperrazza, Don Rodrigues, Dr. Marina Ansaldo, and Dr. Mel Evans, none of whom I had encountered before this institute. Conversations emerging with Lauren Kersey have also suggested intriguing possibilities for symposia at participants' home institutions. As well, I look forward to working with CLIR-DLF Fellow for Data Curation in Early Modern Studies Meaghan Brown.

During our culminating presentations, the institute's participants showed incredible generosity toward one another, and I am looking forward greatly to meetings at conferences throughout the year, as well as to the reunion in Spring 2016. (In particular, the example of Dr. Anupam Basu is both prompt and inspiration.) I am also drawn to analytical possibilities presented by Serendip and have spoken briefly with Eric Alexander about the potential for making use of its methods in the context of my project.

In all areas, I hope to cultivate ongoing connections.

Already, the conversations of "Early Modern Digital Agendas: Advanced Topics" have exercised a profound impact upon my work, as detailed. Over the coming year, I am planning to apply for grants in related areas, and I hope the Folger will continue to provide perspective and may consider collaboration. As it is likely my projects will enhance existing datasets relating to the early modern period, I would be

grateful for the opportunity to speak with Director of Digital Access Eric Johnson regarding longer-term possibilities for the Folger hosting or co-hosting components of this data.

As detailed above, further offerings in EMDA 2015 areas, such as corpus linguistics and metadata, would prove extremely helpful to the research community the Folger continues to convene. Building upon discussions regarding the EEBO-TCP corpus, I would say an understanding of statistics remains vital to registering and responding appropriately to insights large textual corpora may proffer. Yet such perspective remains remote for many, as does a strong sense of where to begin in exploring the topic. (Since EMDA 2015, blog posts by Folger Director Dr. Michael Witmore have considered both areas.)

To address this situation, I would suggest the Folger continue its work for scholars, teachers, and students with a series of workshops on humanities statistics, perhaps using existing projects and familiar resources for illustration. Using tools such as stylo and the example of Visualizing English Print would support participants' engaging large-scale questions in more granular terms. Here, I also find compelling Dr. Witmore's aspiration to test major scholarly assertions of the twentieth century. Future Folger symposia might well set agendas through major works of criticism—perhaps ones themselves involving earlier research at the Folger. Such work seems poised to illustrate both the methods and the value of newer approaches.

Given the importance of work with metadata to any large-scale computational project, the immense strengths of Folger staff in this area might well support a sort of "Early Modern Metadata Camp," particularly for those developing projects that would benefit from expert, ongoing feedback. The interests many share with the Folger in curating and enhancing EEBO-TCP metadata suggests strongly an event of this kind might prove beneficial to all. (Here, work might be directed by Executive Director of the Folger Institute Dr. Kathleen Lynch, with the participation of Trevor Muñoz and his collaborators, and feature key sessions led by Folger personnel such as Head of Collection Information Services Dr. Erin Blake, CLIR-DLF Fellow for Data Curation in Early Modern Studies Dr. Meaghan Brown, and many further Folger staff members whose expert perspective prepares them to support and encourage interest in this area.)

Such an institute could support more granular engagement with the projects of the Folger itself, including Visualizing English Print and its Digital Anthology of Early Modern English Drama. As well, it would appear poised to encourage insights via its extraordinarily qualified personnel. Since many projects of this kind are emerging, applications might well focus on specific challenges and choices facing projects in progress, with cases for admission made with reference to the benefits Folger perspective would provide.

Related to this suggestion has been my growing awareness of ways the study of manuscripts may enrich the perspective my currently print-based project is able to provide. In conjunction with the Folger's Early Modern Manuscripts Online (EMMO) project, I am eager to explore these connections, contribute transcriptions, and encourage further engagement at my home institution. Here, I am extremely grateful for the ongoing work of Curator of Manuscripts and Archivist Dr. Heather Wolfe, Database Applications Associate Michael Poston, and EMMO Project Manager Dr. Paul Dingman.

Ultimately, I believe my own project will intersect with many Folger initiatives. As I seek to balance insights of book history with the power of computational perspective, it is difficult to envision an institution more suited than the Folger with which to work as a scholar, given its commitment to maximizing the potential of digital initiatives amid an ongoing, rich tradition of material textual scholarship. The Folger's history of attention to individual collectors is also compelling.

While I am not sure of the form secondary school engagement might take, this topic is also one I would suggest, particularly given emerging computer science requirements in many states. Data sets maintained by the Folger could continue to be framed for secondary and undergraduate use, and ongoing support for work with digital tools, with proper documentation, could likely spark interest in work engaging the next generation of Shakespearean scholars. Assessing emerging audience needs in this area also appears vital.

As always, the Folger Institute was an exemplary host, and I could not speak more strongly in favor of its convening further workshops, seminars, and institutes along related lines. Its understanding of group dynamics, as well as its commitment to cultivating community, shone through at every turn, from the boardroom's organization of space, to well-mediated group discussions, to social events supporting the interpersonal dynamics so crucial to solidifying connections made. (Special thanks are due to Dr. Hope and to Dr. Meaghan Brown for hosting informal gatherings, as well.)

This commitment to cultivating community helped bring about unexpected benefits. Early in the institute, I experienced significant technical difficulties with my own equipment—ones that threatened to impact my ability to participate. These issues were addressed both through the technical assistance of the Folger's own instructional technology staff and—in a wonderful moment of scholarly generosity—through the loaned computer of an EMDA 2015 faculty member. This gesture was, I believe, encouraged by the atmosphere of shared scholarly endeavor the Folger cultivates, and I am grateful on all fronts.

Also deserving special mention is the Folger's commitment to ensuring all participants are well supported both in the sessions themselves and more broadly during their time in residence. Beyond the invaluable work of Assistant Director for Scholarly Programs Dr. Owen Williams, whose history with the Folger remains vital to the many forms of coordination required for such success, great thanks are due to Folger Institute Program Assistant Elyse Martin, whose interpersonal and intellectual perspective sustained the institute in countless ways, as well.

Finally, I appreciate the Folger's having anticipated the range of technical issues that might arise by supporting two technical assistants. Having both Deidre Stuffer and Eric Alexander on hand allowed for multiple approaches and rapid response in the event of difficulties, and both are to be thanked greatly for their technical skills and their intellectual contributions.

Perhaps ironically for those whose shared interests are digital, I believe face-to-face meetings will prove key to maintaining, enriching, and extending the community created by EMDAs I and II. Memories of shared experiences, as well as ongoing conversations, provide a sense of support and encouragement unable to be duplicated otherwise. The Folger has already worked significantly to this end by scheduling a joint reunion for both groups in May 2016. Having this event in view will, I believe, encourage members of both groups to interact in forums throughout the year. I look forward to these developments.

Along related lines, electronic means of communication will be used to the degree the groups' members see themselves as part of an interconnected, active research community. Having a listserv shared between the two will likely be helpful, though time may be required for EMDA15 participants to forge connections with EMDA13 counterparts. Again, I believe this year will strengthen these links substantially.

While EMDA 2015's Facebook page is continuing to support the second group's internal connections, I am also working to advance conversations through e-mails, listserv posts, and other forms of social media. Doing so will, I hope, increase participants' awareness of mutual interests and help extend both the reach and the grasp of this compelling scholarly community.

While this topic has largely been covered above, I would reiterate the importance of face-to-face meetings (both at the Folger and elsewhere), shared panels, and Folger workshop sessions potentially featuring EMDA 2015 participants as session leaders. This last might well support the broader Folger community's registering emerging methods' power to contextualize and extend scholarly work already groundbreaking in its own right. (Here, I would again cite Dr. Witmore's aspiration to probe the grounds of major twentieth-century scholarly assertions concerning the early modern period—an initiative that demands discussion and would, I believe, prove compelling for many to engage.)

More broadly, I would see as an enduring contribution the possibility of EMDA 2015's forming a cohort that actively and thoughtfully encourages scholars to cast the figures of their qualitative insights against grounds provided by large data sets. Perspective in both realms remains vital, and EMDA 2015 participants seem uniquely well suited to provide it.

To both the NEH and the Folger Institute, thank you so very much for this incredible opportunity.

EMDA facilitated a wide, yet deep and thorough, examination of the many practices that can fall under the term "digital humanities." These practices are so new to the field of literary studies (and other fields in the humanities), that it's important to start a dialogue that can lead to disciplinary standards, notions of best practices, and grounds of assessment. EMDA was an important place to host this conversation, which will inform how I design my DH projects, write future articles incorporating the digital humanities, and advise students at my university.

Critical discussion typically followed hands-on interaction or clear, detailed demonstrations from experts. Sessions gave equal attention to A) how the results or conclusions were formed, and B) the degree to which we should give credence to the results. These two components necessarily belong together, but all too often they are treated separately. The discussions and demos also covered a broad range of steps in any DH project, from data production to data analysis to data visualization.

The director and presenters were all exceptional. Mike Gleicher, in particular, presented an especially useful and approachable description of PCA and other basic statistical concepts.

The introduction to databases (FileMaker Pro) was especially useful. Perhaps the methods of storing documents (like all of EEBO-TCP), quickly and efficiently pulling samples from these documents could have been demonstrated in more detail.

I am currently working on an article with two other EMDA participants, using a tool that I only encountered through them at EMDA. I have also visited one EMDA lecturer for consultation on another project.

The meeting space was open, inviting, and the perfect size. The technology all ran at a good speed, and there were numerous people who could assist with technical difficulties or questions at any time.

Perhaps the Folger could start a peer-reviewed journal focused primarily around the application of digital humanities in the field of early modern studies?

Fifteen participants; twelve responses submitted.

Early Modern Digital Agendas (June 2015)

Technical Report
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28 September 2015

Introduction

Early Modern Digital Agendas, an NEH-funded Folger Institute, ran for three weeks in June 2015 under Professor Jonathan Hope. Participants and visiting faculty demonstrated software and presented research on various early modern and otherwise historical digital research projects. Moreover, the participants and the faculty discussed the future of early modern digital scholarship through an exploration of emergent and established technologies for research on and exploration of digital objects. Participants extended conversations held at the first version of the institute (July 2013). Unlike the first institute, those attended were required to be engaged in a project of digital scholarship. The Folger proved to be a stimulating environment--not only did access to the Folger's resources enhance the quality of participants' scholarship, but the Folger as a physical space served as an invaluable hub to connect scholars who may otherwise have not had the opportunity to meet. Participants left the institute as members of an international community of scholars, even collaborating with each other shortly after the institute ended.

Our roles as the on-site Technical Assistant (Eric Alexander) and Technical Assistant for Communications and Digital Presence (Deidre Stuffer) at the Institute were as follows: serve as connectors between Folger employees and the Institute where applicable; create and manage digital spaces; assist participants with installing and using featured software on their computers; live-Tweet institute sessions in a note-taking capacity for participants and a reporter for scholars not in attendance. In this report, we will outline the successes of these roles and offer suggestions that may aid future Technical Assistants.

Use of the Folger Boardroom

In large, the Boardroom of the Folger served the Institute's needs for meetings, presentations, and collaborations. Between both the scheduled and unscheduled time spent there by all participants, it became something of a "home away from home." The space retained its strengths from 2013, with close proximity to both the library upstairs and IT across the hall proving quite useful. A number of suggestions from the previous Technical Assistant, Heather Froelich, seem to have improved the experience even further. Most notably, the easy access to electrical outlets was crucial, and Owen Williams was well versed in the use of the projector, making any troubleshooting surrounding it go relatively smoothly.

Digital Tools and Techniques

Instructors and presenters at the workshop took full advantage of the technical expertise of this year's participants, and engaged the attendees in the use of a wide variety of digital tools and techniques. The Technical Assistant (Eric Alexander) was tasked with helping participants in the installation and use of these artifacts, as well as helping disseminate them.

For dissemination, the EMDA coordinators comprised a thorough schedule of sessions, complete with descriptions of the tools required and instructions for their installation. When anything wasn't available at an easily linkable website, it was shared over a DropBox folder (which also served as the repository for other readings and documents). Though the level of detail provided in the installation instructions varied by the presenter, it served as quite a valuable go-to reference document for the workshop. DropBox also served its purpose relatively well. Though there were some issues with documents being accidentally deleted, which is to be expected when many people have access to a shared repository. These issues were quickly resolved using DropBox's change history management tools. DropBox's history tools have improved since the last EMDA in 2013, and will likely continue to do so. Nonetheless, it would likely be helpful for future Technical Assistant's to be warned of and prepare for this possible eventuality so that it can be dealt with quickly and efficiently.

One of the challenges with a workshop that deals with so many different pieces of software and so many participants is that installation can differ from platform to platform. At the workshop, there were participants that used both Mac laptops and PC laptops, both ranging from brand-new to four or five years old. It was very helpful when installation instructions included consideration for these issues, and testing on multiple operating systems (either by the presenters or the Technical Assistants) would be valuable, though this may not be possible for all presenters. Encouraging participants to install software well ahead of time and come prepared with issues and questions for the Technical Assistants would be a good idea, as participants that did this were less likely to have issues in-the-moment.

While such measures could cut down on the amount of in-the-moment troubleshooting that is required, it is likely impossible to eliminate it entirely. For this reason, having a Technical Assistant with a computing background devoted entirely to making such processes run smoothly proved invaluable. Eric was able to assist in the installation and use of software required by instructors and presenters, and was able to meet with participants outside of the scheduled meeting times in order to help with ongoing projects or prepare for the next day's session. Beyond better preparation (on which Eric admittedly should have spent more time before arriving), it is possible that another similar set of eyes would be valuable for in-the-moment troubleshooting at future iterations of the workshop. Frequently, the number of participants having issues made it difficult to address them all in a timely fashion, and participants had to wait for Eric's help. (This was more often the case for sessions involving programming or when

the presenters had less experience dealing with such issues.) For the most part, things went smoothly, especially with the added help of Deidre and secondary presenters.

Digital Communication

Due to the success of Twitter during the 2013 Institute, the role of Technical Assistant for Communications and Digital Presence, staffed by Deidre Stuffer, was created for the 2015 Institute. It capitalized on Twitter as a platform to build community and collective knowledge. Dividing technical responsibilities between two assistants ensured that neither quality of technical assistance nor online presence were sacrificed. Institute participants found the Twitter feed (@EMDigAgendas) valuable as a repository for resources and information regarding presentations. Furthermore, Institute participants contributed to the Twitter feed (via #EMDA2015) with their own notes, impressions, and questions. The feed even featured pictures of the sessions. Live-Tweets from the Boardroom were watched eagerly from afar by many in different time zones--Twitter users watched the hashtag posed questions to the Institute. In the end, the Institute generated an archive of 3,525 tweets (http://twitter.historycarnival.org/archives/?archive=EMDA2015). Overall, the Twitter feed furthered the Institute's goals of community building and collaborative inquiry at an international scale.

Early Modern Digital Agendas used a listserv mailing list (<u>Emda2015@actwin.com</u>) to distribute information to participants before, during, and after the Institute. It was most valuable pre- and post-Institute. Before, participants and faculty used the listserv to introduce themselves and to express their hopes for what they would accomplish together. Since July, the listserv has been used to relay information re: professional development opportunities and to broadcast novel digital scholarship. During the Institute, the listserv and Twitter were used concurrently to disseminate reminders. The listserv remains a beneficial formal channel of communication.

In addition to communication channels, Institute participants have access to two private collaborative spaces: a MediaWiki created during Early Modern Agendas and a Facebook group made as an informal space to brainstorm and share scholarship after the Institute. The MediaWiki was made to allow participants to aggregate resources and their knowledge on topics explored at Early Modern Digital Agendas. Currently the MediaWiki has few contributions, which may be due to what little time has passed since participants left the Folger. Perhaps the Twitter feed's prominence may have reduced the group's need to use the MediaWiki as a repository. Many participants used Twitter prior to the Institute and had cultivated online presences, therefore having recourse to showcase their collaboration on personal websites and blogs. The private Facebook group facilitates sharing among participants, and it receives steady activity.

The digital communications used to support Early Modern Digital Agendas enhanced the experiences of the 2015 cohort. For future iterations of digital workshops, though, a technical assistant who handles digital presence must be sensitive to the fact that not all participants wish

to engage in digital spaces. A few Institute participants did not want their current research or images of them to be posted on Twitter. A technical assistant managing digital presence must also communicate with visiting faculty to ensure that their activity does not violate legal contracts (e.g., tweeting material that is to be published in articles). To further assist a technician with logistics, it would be worthwhile to provide him or her with pertinent information in advance of the institute, such as the Twitter handles of faculty speakers and links to featured material. These cautions and suggestions should enable the technical assistant to not only enrich participants' experiences and memories of the Institute, but to involve the participants in engendering and promoting a respectful and inviting community.

Conclusion

Overall, we found that our duties at the Institute went smoothly. At times, an extra set of technical eyes could make the installation and use of software go more smoothly on a variety of operating systems and machines, and could help keep all participants fully engaged. However, this could also be facilitated by more pre-workshop preparation (on the part of the Technical Assistants, participants, and faculty). In general, these issues did not keep the participants from being able to engage in fruitful work and discussion, or serve as a great impediment to the Institute's efficacy. The suggestions we made would only serve to make improvements upon an already successful model of digital workshops and outreach for the Folger.